

EXHIBIT 12

Analysis of Infringement of U.S. Patent No. 7,216,301 by Microchip Technology Incorporated

Plaintiffs Caddo Systems, Inc. and 511 Technologies, Inc. (“Caddo”), provide this final and exemplary infringement analysis with respect infringement of U.S. Patent No. 7,216,301, entitled “ACTIVE PATH MENU NAVIGATION SYSTEM” (the “’301 patent”) by Microchip Technology Incorporated (“Microchip”). The following chart illustrates an exemplary analysis regarding infringement by Microchip’s products and services (“’301 Accused Instrumentalities”):

- (i) web pages and content, including user interfaces such as a hierarchical information structure, to be interactively presented in browsers, including, without limitation, the web pages and content accessible via <https://www.microchip.com/> (as shown below) including www.microchipdirect.com and maintained on servers located in and/or accessible from the United States under the control of Defendant that allow navigating a multi-level hierarchical information structure, where each level in the information structure contains plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level;
- (ii) software, including, without limitation, software that allows web pages and content to be interactively presented in and/or served to browsers to facilitate navigating within a multi-level hierarchical information structure, where each level in the information structure contains plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level; and
- (iii) computer equipment, including, without limitation, computer equipment that stores, serves, hosts, supports, and/or runs any of the foregoing or that allows navigating within a multi-level hierarchical information structure, where each level in the information structure contains plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level, and any products, devices, systems, and/or components of systems with the same or substantially the same technical features and/or functionalities.

The analysis set forth below is based largely upon information from publicly available resources regarding the Accused Instrumentalities and Microchip’s limited discovery production, as discovery in this matter has not yet been completed.

Unless otherwise noted, Caddo contends that Microchip directly infringes the ’301 patent in violation of 35 U.S.C. § 271(a) by making, using, and/or selling, and/or offering to sell in the United States, and/or importing into the United States, without authority or license, the Accused Instrumentalities.

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The following exemplary analysis demonstrates that infringement. Unless otherwise noted, Caddo further contends that the evidence below supports a finding of indirect infringement under 35 U.S.C. § 271(b) and 35 U.S.C. § 271(c) in conjunction with other evidence of liability.

Unless otherwise noted, Caddo believes and contends that each element of each claim asserted herein is literally met through Microchip's provision or importation of the Accused Instrumentalities. However, to the extent that Microchip attempts to allege that any asserted claim element is not literally met, Caddo believes and contends that such elements are met under the doctrine of equivalents. More specifically, in its investigation and analysis of the Accused Instrumentalities, Caddo did not identify any substantial differences between the elements of the patent claims and the corresponding features of the Accused Instrumentalities, as set forth herein. In each instance, the identified feature of the Accused Instrumentalities performs at least substantially the same function in substantially the same way to achieve substantially the same result as the corresponding claim element.

Caddo reserves the right to supplement and/or amend the positions taken in this infringement analysis, including with respect to literal infringement and infringement under the doctrine of equivalents, if and when warranted by further information obtained by Caddo, including but not limited to information adduced through information exchanges between the parties, fact discovery, expert discovery, and/or further analysis.

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

U.S. Patent No. 7,216,301 Claims	Infringement by the Microchip '301 Accused Instrumentalities
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<p>1. A method for navigating within a multi-level hierarchical information structure where each level in the information structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level, said method comprising the steps of:</p>	<p>The '301 Accused Instrumentalities ("Accused Instrumentalities") include:</p> <ul style="list-style-type: none"> (iv) web pages and content, including user interfaces such as a hierarchical information structure, to be interactively presented in browsers, including, without limitation, the web pages and content accessible via https://www.microchip.com/ including www.microchipdirect.com and maintained on servers located in and/or accessible from the United States under the control of Defendant that allow navigating a multi-level hierarchical information structure, where each level in the information structure contains plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level; (v) software, including, without limitation, software that allows web pages and content to be interactively presented in and/or served to browsers to facilitate navigating within a multi-level hierarchical information structure, where each level in the information structure contains plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level; and (vi) computer equipment, including, without limitation, computer equipment that stores, serves, hosts, supports, and/or runs any of the foregoing or that allows navigating within a multi-level hierarchical information structure, where each level in the information structure contains plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level, and any products, devices, systems, and/or components of systems with the same or substantially the same technical features and/or functionalities. <p><u>Direct Infringement</u> Microchip has directly infringed claims 1-5 and 9 of the '301 patent under 35 U.S.C. § 271(a) each time that it makes, uses, tests, and/or hosts in the United States the Accused Instrumentalities, or products, devices, systems, and/or components of systems, that practice the claimed methods described hereinbelow. Microchip also directly infringes each of the Asserted Claims under 35 U.S.C. § 271(a) each time that it imports the Accused Instrumentalities into the United States.</p> <p><u>Indirect Infringement</u> Microchip has induced and continues to induce infringement by others of claims 1-5 and 9 of the '301 patent under 35 U.S.C. § 271(b) by (a) providing the Accused Instrumentalities to third parties and intending them to use the Accused Instrumentalities; (b) advertising these Accused Instrumentalities through Microchip's own and through third party websites; (c) encouraging customers and other third parties to communicate directly with Microchip about the Accused Instrumentalities for purposes of technical assistance and repair as well as sales and marketing; (d) providing instructions as to how to use the Accused Instrumentalities in an infringing manner.</p>
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Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

Microchip has contributed to and continues to contribute to infringement by others of claims 1-5 and 9 of the '301 patent under 35 U.S.C. § 271(c) by providing the Accused Instrumentalities, including web pages and content, user interfaces (e.g., hierarchical collapsing menu structure, hierarchical information structure, information structure, and/or hierarchical menu structure), software, and/or computer equipment as identified above, in the United States without authority, Microchip contributes to the direct infringement of third-parties including end users of the Accused Instrumentalities.

To the extent that the preamble of Claim 1 is a limitation, the '301 Accused Instrumentalities provide, or support the provision of, a method as described below.

The '301 Accused Instrumentalities provide a method for navigating within a multi-level hierarchical information structure where each level in the information structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level (e.g., the '301 Accused Instrumentalities provide a method for navigating within a multi-level hierarchical collapsing menu structure where each level in the information structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level (e.g., "Products" includes "Amplifiers and Linear," which includes "Operational Amplifiers," "Instrumentation Amplifiers," "Current Sense Amplifiers," "Comparators," "Programmable Gain Amplifiers," and "DC Power Current Monitors")) as shown below:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows the Microchip website's product navigation menu. The 'Products' tab is highlighted with a red border. Below it, a sub-menu for 'Amplifiers and Linear' is displayed, with other options like 'Clock and Timing', 'Data Converters', 'Embedded Controllers and Super I/O', and 'Foundry Services' visible but not selected. A specific product page for 'Comparators' is shown, featuring a large image of a circuit board component.

Microchip

Products Applications Design Support Order Now About

< Microcontrollers and Microprocessors > Overview

Low Power, High Flexibility Comparators

By product category, including devices for Aerospace and Defense, Industrial, Consumer, and more. By output configuration, including rail-to-rail, single, dual, and quad comparators. Microchip's comparator solutions enable low-power design options.

Amplifiers and Linear

Clock and Timing > Instrumentation Amplifiers

Data Converters > Operational Amplifiers

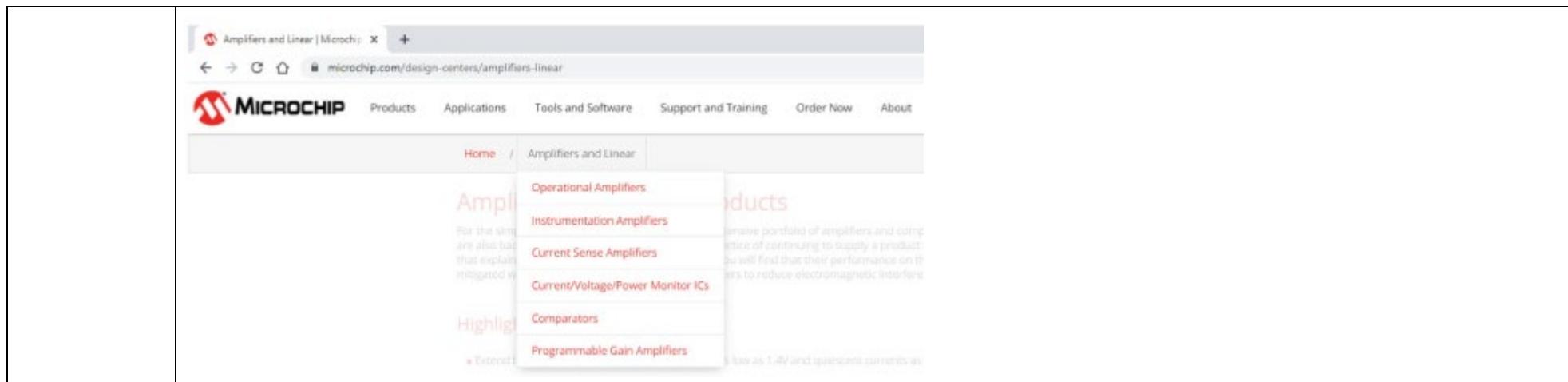
Embedded Controllers and Super I/O > PGAs

Foundry Services

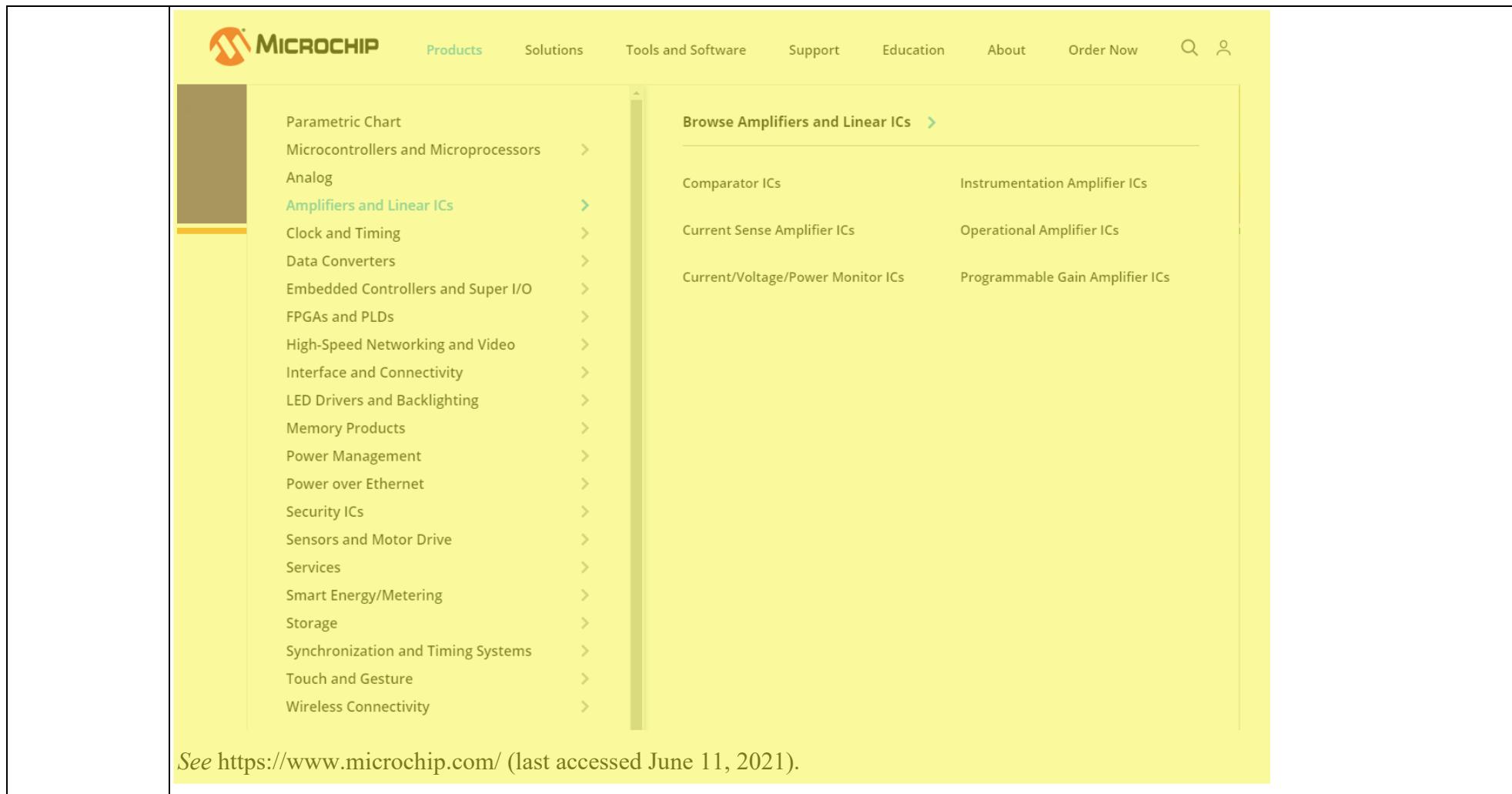
See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

See also MCHP-CADDO_0000935:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301



Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301



The screenshot shows the Microchip website homepage. The header includes the Microchip logo, navigation links for Products, Solutions, Tools and Software, Support, Education, About, Order Now, and a search function. The main content area features a sidebar with a "Parametric Chart" and a list of product categories. A large central box is titled "Browse Amplifiers and Linear ICs".

Parametric Chart

- Microcontrollers and Microprocessors >
- Analog >
- Amplifiers and Linear ICs** > (highlighted)
- Clock and Timing >
- Data Converters >
- Embedded Controllers and Super I/O >
- FPGAs and PLDs >
- High-Speed Networking and Video >
- Interface and Connectivity >
- LED Drivers and Backlighting >
- Memory Products >
- Power Management >
- Power over Ethernet >
- Security ICs >
- Sensors and Motor Drive >
- Services >
- Smart Energy/Metering >
- Storage >
- Synchronization and Timing Systems >
- Touch and Gesture >
- Wireless Connectivity >

Browse Amplifiers and Linear ICs >

Comparator ICs	Instrumentation Amplifier ICs
Current Sense Amplifier ICs	Operational Amplifier ICs
Current/Voltage/Power Monitor ICs	Programmable Gain Amplifier ICs

See <https://www.microchip.com/> (last accessed June 11, 2021).

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

providing a graphical user menu system displaying the items of a given level of the hierarchical information structure and enabling selection thereof; and

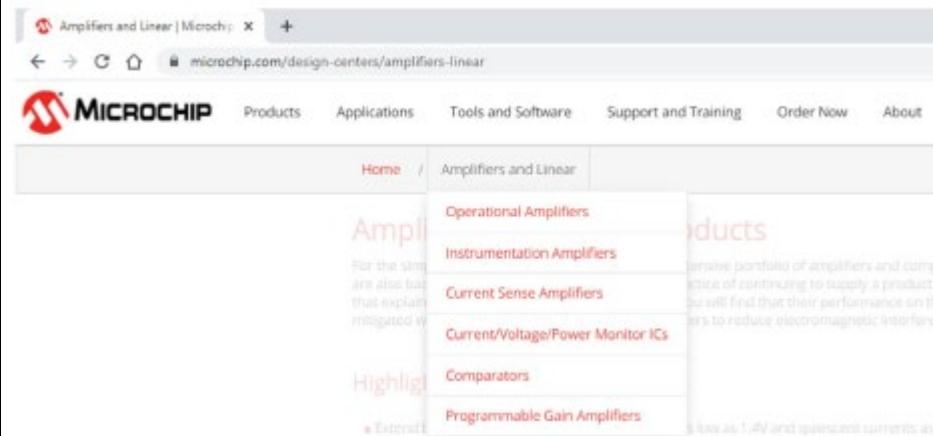
The '301 Accused Instrumentalities provide a graphical user menu system displaying the items of a given level of the hierarchical information structure and enabling selection thereof.

For example, the '301 Accused Instrumentalities provide a graphical user menu system displaying the items of a given level of the hierarchical information structure and enabling selection thereof (e.g., "Products" displays and enables selection of items of a given level, such as "Amplifiers and Linear" and items within that same level).



Home / Amplifiers and Linear / Comparators

See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).



See MCHP-CADDO_0000935.

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

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319 <div class="breadcrumbs-open-btn"><span>Menu</span></div>
320 <div class="breadcrumbs">
321     <div class="breadcrumbs-top-bar">
322         <span class="breadcrumbs-close-btn">x</span>
323     </div>
324
325     <div class="crumbs-wrapper">
326         <div class="crumb">
327             <div class="crumb-top">
328                 <a href="/">Home</a>
329             </div>
330         </div>
331         <span class="breadcrumbs-separator">/</span>
332
333         <div class="crumb has-menu">
334             <div class="crumb-top current">
335                 <a href="/design-centers/amplifiers-linear">Amplifiers
336                 and Linear</a>
337                 <div class="open-menu"><i class="fa fa-angle-down">
338                     </div>
339             <ul>
340                 <li class="">
341                     <a class=" " href="/design-centers/amplifiers-linear/operational-amplifiers">Operational Amplifiers</a>
342                 </li>
343                 <li class="">
344                     <a class=" " href="/design-centers/amplifiers-linear/instrumentation-amplifiers">Instrumentation Amplifiers</a>
345                 </li>
346                 <li class="">
347                     <a class=" " href="/design-centers/amplifiers-linear/current-sense-amplifiers">Current Sense Amplifiers</a>
348                 </li>
349             </ul>
350         </div>
351     </div>
352 
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Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

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349      <a class="" href="/design-centers/amplifiers-linear/current-voltage-p
ower-monitors">Current/Voltage/Power Monitor ICs</a>
350    </li>
351    <li class="">
352      <a class="" href="/design-centers/amplifiers-linear/comparators">Comp
arators</a>
353    </li>
354    <li class="">
355      <a class="" href="/design-centers/amplifiers-linear/programmable-gain
-amplifiers">Programmable Gain Amplifiers</a>
356    </li>
357  </ul>
358 </div>
359
360 </div>
361 </div>
362 <div class="breadcrumbs-curtain"></div>
363
364 <div class="row" data-sf-element="Row">
```

See MCHP-CADDO_0001040-41.

As another example, the '301 Accused Instrumentalities provide a graphical user menu system displaying the items of a given level of the hierarchical information structure and enabling selection thereof (e.g., "Products" displays and enables selection of items of a given level, such as "Microcontrollers and Microprocessors" and items within that same level "Analog," "Amplifiers and Linear ICs," "Clock and Timing" "Data Converters," etc.) as shown below:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows the Microchip website's navigation bar and a sidebar menu. The navigation bar includes links for Products (underlined), Solutions, Tools and Software, Support, Education, About, Order Now, and user icons for search, account, and cart. The sidebar on the left lists categories such as Parametric Chart, Microcontrollers and Microprocessors, Analog, Amplifiers and Linear ICs, Clock and Timing, Data Converters, Embedded Controllers and Super I/O, FPGAs and PLDs, and High-Speed Networking and Video. To the right, there is a section titled "Browse Microcontrollers and Microprocessors" with links for 8-bit MCUs, 32-bit MCUs, PIC® MCUs, AVR® MCUs, 8051 MCUs, Peripherals, Functional Safety, and Legacy 32-bit Microcontrollers (MCUs). A note at the bottom of the sidebar states "See <https://www.microchip.com/> (last accessed June 8, 2021)."

Parametric Chart

Microcontrollers and Microprocessors >

Analog

Amplifiers and Linear ICs >

Clock and Timing >

Data Converters >

Embedded Controllers and Super I/O >

FPGAs and PLDs >

High-Speed Networking and Video >

Browse Microcontrollers and Microprocessors >

8-bit MCUs

32-bit MCUs

PIC® MCUs

AVR® MCUs

8051 MCUs

Peripherals

Functional Safety

Legacy 32-bit Microcontrollers (MCUs)

Applications, Reference Designs and Solutions

DIC10 to DIC24 Migration

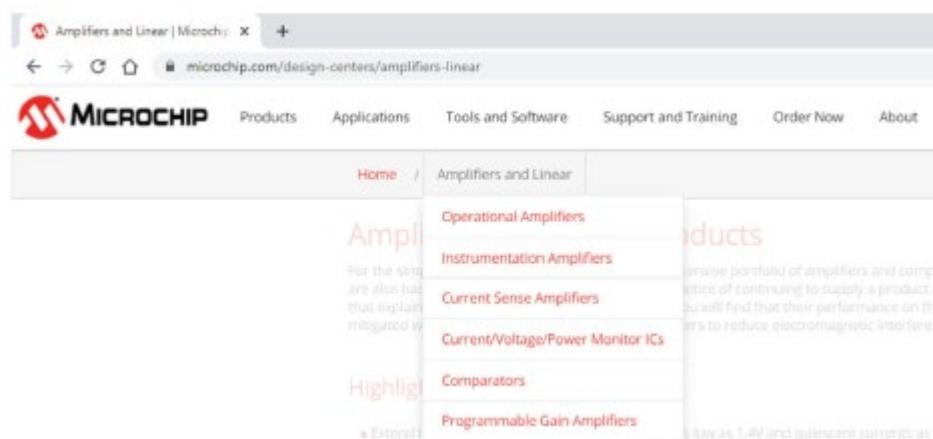
See <https://www.microchip.com/> (last accessed June 8, 2021).

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

<p>dynamically constructing an Active Path as a sequence of active links as items are selected using the graphical user menu system, with one said active link corresponding to each of the items selected, said active links providing direct access to one of a function, corresponding level and menu item without the need to navigate using said graphical user menu system.</p>	<p>The '301 Accused Instrumentalities dynamically construct an Active Path, which has been construed by this Court (Dkt. 34) as a sequence of links dynamically created as a menu item is navigated, as a sequence of active links as items are selected using the graphical user menu system, with one said active link corresponding to each of the items selected, said active links providing direct access to one of a function, corresponding level and menu item without the need to navigate using said graphical user menu system.</p> <p>For example, the '301 Accused Instrumentalities dynamically construct a sequence of links dynamically created as a menu item is navigated, as the sequence of active links as items are selected (<i>e.g.</i>, the '301 Accused Instrumentalities dynamically construct a sequence of links dynamically created (<i>e.g.</i>, “Amplifiers and Linear—Comparators”) as the sequence of active links as items are selected (<i>e.g.</i>, as “Amplifiers and Linear” and “Comparators” are selected)), with one said active link corresponding to each of the items selected. Said active links provide direct access to one of a function, corresponding level and menu item without the need to navigate using said graphical user menu system (<i>e.g.</i>, the '301 Accused Instrumentalities’ sequence of links dynamically created as a menu item is navigated “Amplifiers and Linear—Comparators” corresponds to each of the items sequentially selected, including “Amplifiers and Linear” and “Comparators”).</p>  <p>MICROCHIP</p> <p>Products Applications Design Support Order Now About</p> <p>Home / Amplifiers and Linear / Comparators</p> <p><i>See, e.g.,</i> https://www.microchip.com/design-centers/amplifiers-linear/comparators (last visited Feb. 10, 2020).</p> <p><i>See also</i> MCHP-CADDO_0000935:</p>
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Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

graphical user menu system;



As another example, the '301 Accused Instrumentalities dynamically construct a sequence of links dynamically created as a menu item is navigated, as the sequence of active links as items are selected (e.g., links in this path “Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA,” as a sequence of hierarchical active links as items are selected (e.g., as each hierarchical active link in the path “Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA” is selected, and the active links correspond to each of the items selected using the graphical user menu system) without the need to navigate using said graphical user menu system as shown below:

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301



Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs

8-bit AVR® MCUs

Complete your designs faster with AVR® microcontrollers (MCUs). Offering unsurpassed performance, power efficiency and flexibility, they are an excellent choice for a variety of embedded system designs. Their combination of easily customizable peripherals and the industry's most code-efficient architecture enable you to

See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus/avr-da> (last accessed June 7, 2021); see also:



- [Products](#)
- [Solutions](#)
- [Tools and Software](#)
- [Support](#)
- [Education](#)
- [About](#)
- [Order Now](#)
-
-
-

[Parametric Chart](#)

[Microcontrollers and Microprocessors >](#)

- [Analog](#)
- [Amplifiers and Linear ICs >](#)
- [Clock and Timing >](#)
- [Data Converters >](#)
- [Embedded Controllers and Super I/O >](#)
- [FPGAs and PLDs >](#)
- [High-Speed Networking and Video >](#)

[Browse Microcontrollers and Microprocessors >](#)

8-bit MCUs	32-bit MCUs
PIC® MCUs	32-bit PIC Microcontrollers (MCUs)
AVR® MCUs	32-bit SAM Microcontrollers (MCU)
8051 MCUs	CEC 32-bit MCUs
Peripherals	Legacy 32-bit Microcontrollers (MCUs)
Functional Safety	Applications, Reference Designs and Solutions

[PIC18 to PIC24 Migration](#)

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

Id. at <https://www.microchip.com/>.

See also:

[Products / Microcontrollers and Microprocessors](#)

[Product Categories](#) [Development Tools](#) [Software Solutions](#) [Application Design Centers](#) [Product Selections](#)

[Explore 8-bit MCUs](#)

[Explore 16-bit
MCUs/DSCs](#)

[Explore 32-bit MCUs](#)

[Explore MPUs](#)

Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors>.

See also:

The screenshot shows the Microchip website's navigation bar at the top, featuring the Microchip logo, a search icon, user account icon, and a shopping cart icon. Below the navigation bar, the URL 'Products / Microcontrollers and Microprocessors / 8-bit MCUs' is visible. A secondary navigation bar below it includes links for 'New Products', 'Browse by Architecture', 'Start Developing', 'Peripherals', 'Documentation', 'Support', and 'Video Channel'. The main content area is titled 'Browse by Architecture' and contains two sections: 'PIC Microcontroller Families' and 'AVR Microcontroller Families'. Each section has a brief description and a green 'Explore [Family]' button. At the bottom left, there is a note about the source of the screenshot.

Products / Microcontrollers and Microprocessors / 8-bit MCUs

New Products Browse by Architecture Start Developing Peripherals Documentation Support Video Channel

Browse by Architecture

PIC Microcontroller Families

Streamline designs with the industry's most capable and easy-to-use 8-bit MCUs.

Explore PIC Families

AVR Microcontroller Families

Reduce your development time with the industry's most code-efficient MCU architecture.

Explore AVR Families

Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus>.

See also:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

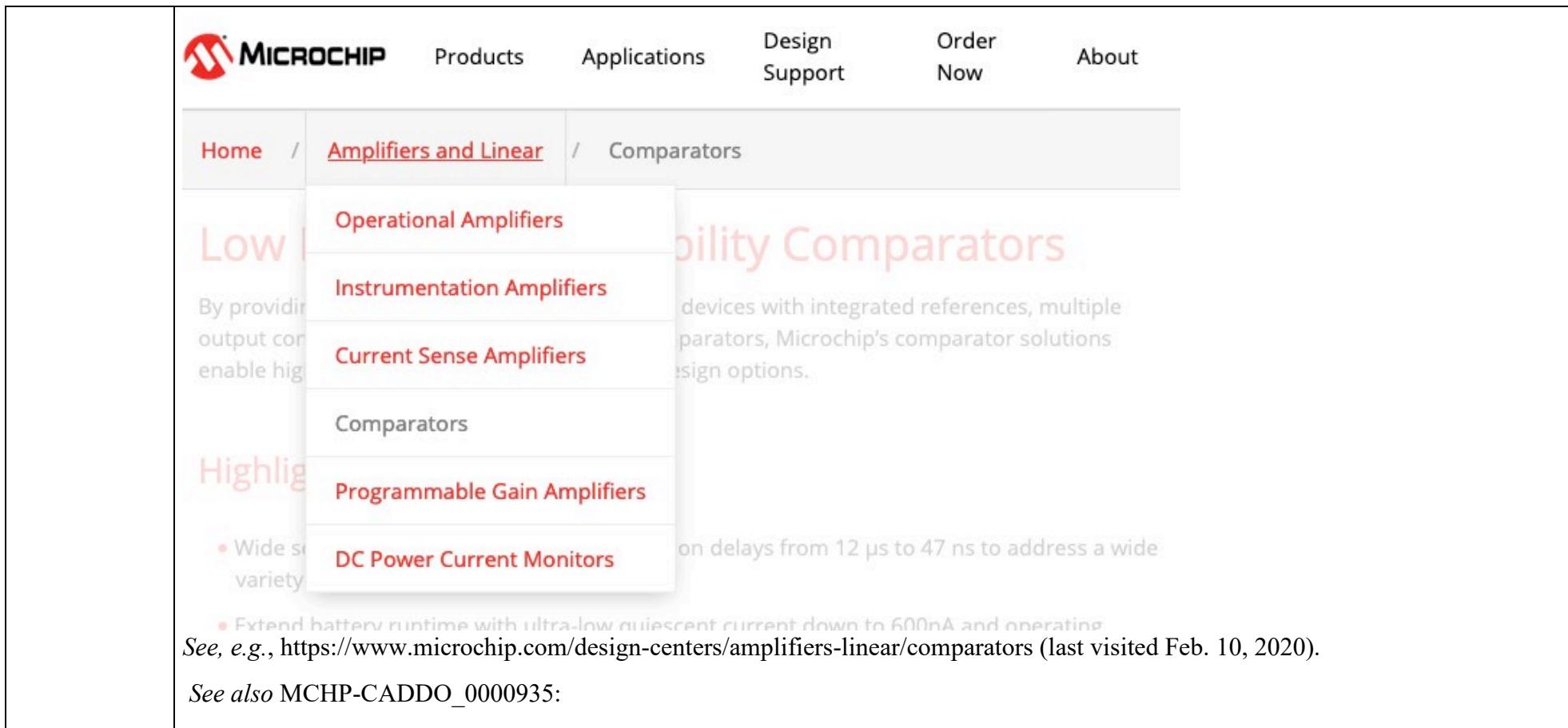
The screenshot shows the Microchip website's product page for 8-bit MCUs. The navigation bar includes links for Products (underlined), Solutions, Tools and Software, Support, Education, About, and Order Now, along with search and user icons. The breadcrumb navigation shows: Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs. Below this, four product cards are displayed:

- AVR DB Family**: Take advantage of the integrated level shifters and three highly configurable op amps to implement real-time control functionality in a variety of industrial control, home appliance, automotive, IoT and other applications. [Learn More](#)
- AVR DA Family**: Improve system response for complex single-chip control applications enabled by a combination of large memory and interconnectable Core Independent Peripherals. [Learn More](#)
- ATtiny1627 Family**: Improve real-time performance with high-speed measurement, or measure small amplitude signals in harsh and noisy environments with the 12-bit differential ADC and Programmable Gain Amplifier (PGA). [Learn More](#)
- ATtiny1607 Family**: Improve performance and reduce the complexity of your real-time control applications with high-speed analog and hardware-based Core Independent Peripherals. [Learn More](#)

Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus> (last accessed Jun. 8, 2021).

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

each said active link enabling the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the Active Path.	<p>Each active link of the '301 Accused Instrumentalities enables the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the Active Path, which has been construed by this Court (Dkt. 34) as a sequence of links dynamically created as a menu item is navigated.</p> <p>For example, each active link in the '301 Accused Instrumentalities enables the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the sequence of links dynamically created as a menu item is navigated (<i>e.g.</i>, the '301 Accused Instrumentalities enable the user to directly browse all items under "Amplifiers and Linear" such as "Operational Amplifiers," "Instrumentation Amplifiers," "Current Sense Amplifiers," "Comparators," "Programmable Gain Amplifiers," and "DC Power Current Monitors" without affecting the a sequence of links dynamically created as a menu item is navigated "Amplifiers and Linear—Comparators") as shown below:</p>
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The screenshot shows the Microchip website's navigation bar with links for Products, Applications, Design Support, Order Now, and About. Below the navigation, a breadcrumb trail indicates the current page: Home / Amplifiers and Linear / Comparators. The main content area features a large image of a circuit board with several electronic components, including a central integrated circuit labeled "COMPARATOR". To the left of the image, there is a sidebar with sections for Operational Amplifiers, Instrumentation Amplifiers, Current Sense Amplifiers, and Comparators. The Comparators section is currently selected. Below this, there is a "Highlight" section with bullet points about wide supply voltage ranges and low quiescent currents. A note at the bottom of this section states: "See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020)." Another note below that says: "See also MCHP-CADDO_0000935:".

MICROCHIP

Products Applications Design Support Order Now About

Home / [Amplifiers and Linear](#) / Comparators

Low Quiescent Current

By providing a low output current, these comparators enable high speed operation.

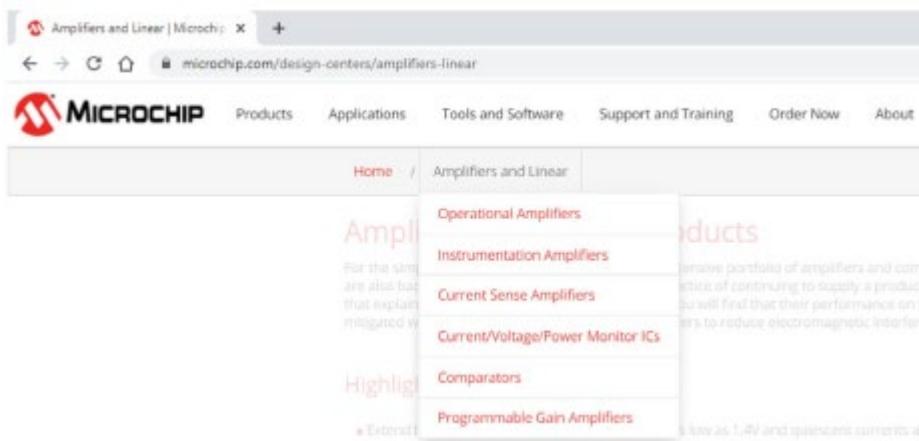
High Supply Voltage Range

- Wide supply voltage variety
- Extend battery runtime with ultra-low quiescent current down to 600nA and operating

See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

See also MCHP-CADDO_0000935:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301



The screenshot shows a web browser window for the Microchip website. The URL in the address bar is microchip.com/design-centers/amplifiers-linear. The page title is "Amplifiers and Linear | Microchip". The navigation menu includes links for Products, Applications, Tools and Software, Support and Training, Order Now, and About. Below the menu, the breadcrumb trail shows "Home / Amplifiers and Linear". A dropdown menu is open under "Products", listing categories such as Operational Amplifiers, Instrumentation Amplifiers, Current Sense Amplifiers, Current/Voltage/Power Monitor ICs, Comparators, and Programmable Gain Amplifiers. The main content area displays information about operational amplifiers, mentioning a diverse portfolio and the ability to reduce electromagnetic interference.

As another example, each active link in the '301 Accused Instrumentalities enables the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the sequence of links dynamically created as a menu item is navigated (e.g., the '301 Accused Instrumentalities enable the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items in the path “Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs” without affecting the a sequence of links dynamically created as a menu item is navigated “Products—Microcontrollers and Microprocessors”) as shown below:

Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs

8-bit AVR® MCUs

Complete your designs faster with AVR® microcontrollers (MCUs). Offering unsurpassed performance, power efficiency and flexibility, they are an excellent choice for a variety of embedded system designs. Their combination of easily customizable peripherals and the industry's most code-efficient architecture enable you to

See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus/avr-da> (last visited Jun. 7, 2021).

For example, the user can directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items in the path “Products / Microcontrollers and Microprocessors” such as “Product Categories,” “Development Tools,” “Software Solutions,” “Application Design Centers,” and “Product Selections” without affecting the path “Products / Microcontrollers and Microprocessors” (e.g., the user can browse items under “Product Categories,” “Development Tools,” “Software Solutions,” “Application Design Centers,” or “Product Selections” without affecting the path “Products / Microcontrollers and Microprocessors.”).

As another example, each active link in the ’301 Accused Instrumentalities enable the user to directly browse all items on any given level of the hierarchical information structure (e.g., all items under “Products / Microcontrollers and Microprocessors”) including all hierarchically subordinate items (e.g., browsing “Development tools” allows browsing of subordinate items such as products associated with “Part Number: DM164136” or “Part Number: DM330028”) without affecting the sequence of links dynamically created as a menu item is navigated as shown below:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

 MICROCHIP Products Solutions Tools and Software Support Education About Order Now   

Products / Microcontrollers and Microprocessors

Product Categories Development Tools Software Solutions Application Design Centers Product Selections

Featured Development Tools

Development Board	Description
Curiosity High Pin Count (HPC) Development Board Part Number: DM164136	The Curiosity High Pin Count (HPC) Development Board (DM164136) supports a wide variety of 8-bit MCUs. Curiosity Development Boards are cost-effective, fully-integrated MCU development platforms. The development board includes an integrated programmer/debugger and requires no additional hardware to get started.
	
Learn More	
dsPIC33CH Curiosity Development Board Part Number: DM330028	Evaluate the dual-core dsPIC33CH family using this low-cost board with a configurable power supply load step transient generator. Or customize the board for your application using the two mikroBUS™ interfaces for adding a large variety of click Boards.

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

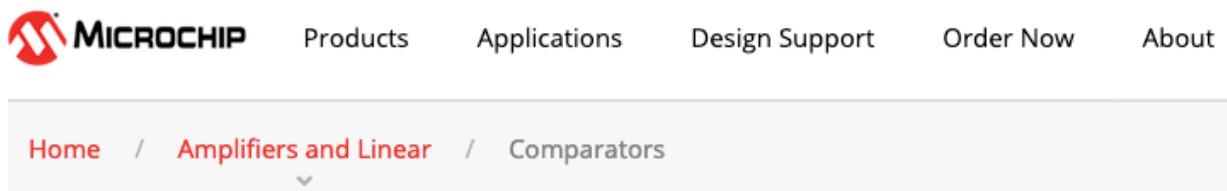
See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors#Development%20Tools> (last accessed Jun. 8, 2021).

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

2. The method for navigating according to claim 1, further comprising: providing pre-defined short-cuts enabling direct access to a given item; and

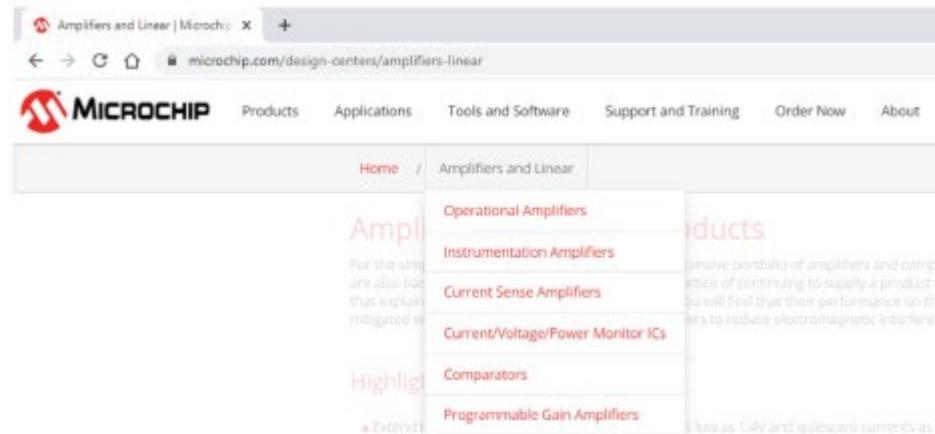
The '301 Accused Instrumentalities provide pre-defined short-cuts enabling direct access to a given item.

For example, the '301 Accused Instrumentalities provide pre-defined short-cuts enabling direct access to a given item (e.g., the '301 Accused Instrumentalities provide pre-defined shortcuts, such as “Amplifiers and Linear” or “Comparators” in the collapsing menu, enabling direct access to a given menu item).



See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

See also MCHP-CADDO_0000935:



Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

```
319 <div class="breadcrumbs-open-btn"><span>Menu</span></div>
320 <div class="breadcrumbs">
321     <div class="breadcrumbs-top-bar">
322         <span class="breadcrumbs-close-btn">x</span>
323     </div>
324
325     <div class="crumbs-wrapper">
326         <div class="crumb">
327             <div class="crumb-top">
328                 <a href="/">Home</a>
329             </div>
330         </div>
331         <span class="breadcrumbs-separator">/</span>
332
333         <div class="crumb has-menu">
334             <div class="crumb-top current">
335                 <a href="/design-centers/amplifiers-linear">Amplifiers
336                 and Linear</a>
337                 <div class="open-menu"><i class="fa fa-angle-down">
338                     </div>
339             <ul>
340                 <li class="">
341                     <a class=" " href="/design-centers/amplifiers-linear/operational-amplifiers">Operational Amplifiers</a>
342                 </li>
343                 <li class="">
344                     <a class=" " href="/design-centers/amplifiers-linear/instrumentation-amplifiers">Instrumentation Amplifiers</a>
345                 </li>
346                 <li class="">
347                     <a class=" " href="/design-centers/amplifiers-linear/current-sense-amplifiers">Current Sense Amplifiers</a>
348                 </li>
349             </ul>
350         </div>
351     </div>
352 
```

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

```
349      <a class="" href="/design-centers/amplifiers-linear/current-voltage-p
ower-monitors">Current/Voltage/Power Monitor ICs</a>
350    </li>
351    <li class="">
352      <a class="" href="/design-centers/amplifiers-linear/comparators">Comp
arators</a>
353    </li>
354    <li class="">
355      <a class="" href="/design-centers/amplifiers-linear/programmable-gain
-amplifiers">Programmable Gain Amplifiers</a>
356    </li>
357  </ul>
358 </div>
359
360 </div>
361 </div>
362 <div class="breadcrumbs-curtain"></div>
363
364 <div class="row" data-sf-element="Row">
```

See MCHP-CADDO_0001040-41.

For example, the '301 Accused Instrumentalities provide pre-defined short-cuts enabling direct access to a given menu item (e.g., the '301 Accused Instrumentalities provide pre-defined shortcuts, such as "AVR® MCUs" and "AVR® DA," or "New Products," that enable direct access to those items), as shown below:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows the Microchip Technology website's product navigation menu. The main menu items are Products, Solutions, Tools and Software, Support, Education, About, and Order Now. Below the main menu, there is a sidebar with links to Parametric Chart, Microcontrollers and Microprocessors, Analog, Amplifiers and Linear ICs, Clock and Timing, Data Converters, Embedded Controllers and Super I/O, FPGAs and PLDs, and High-Speed Networking and Video. To the right of this sidebar is a large section titled "Browse Microcontrollers and Microprocessors" with sub-links for 8-bit MCUs, 32-bit MCUs, PIC® MCUs, AVR® MCUs, 8051 MCUs, Peripherals, Functional Safety, 32-bit PIC Microcontrollers (MCUs), 32-bit SAM Microcontrollers (MCU), CEC 32-bit MCUs, Legacy 32-bit Microcontrollers (MCUs), Applications, Reference Designs and Solutions.

Parametric Chart

Microcontrollers and Microprocessors >

Analog

Amplifiers and Linear ICs >

Clock and Timing >

Data Converters >

Embedded Controllers and Super I/O >

FPGAs and PLDs >

High-Speed Networking and Video >

Browse Microcontrollers and Microprocessors >

8-bit MCUs

32-bit MCUs

PIC® MCUs

AVR® MCUs

8051 MCUs

Peripherals

Functional Safety

32-bit PIC Microcontrollers (MCUs)

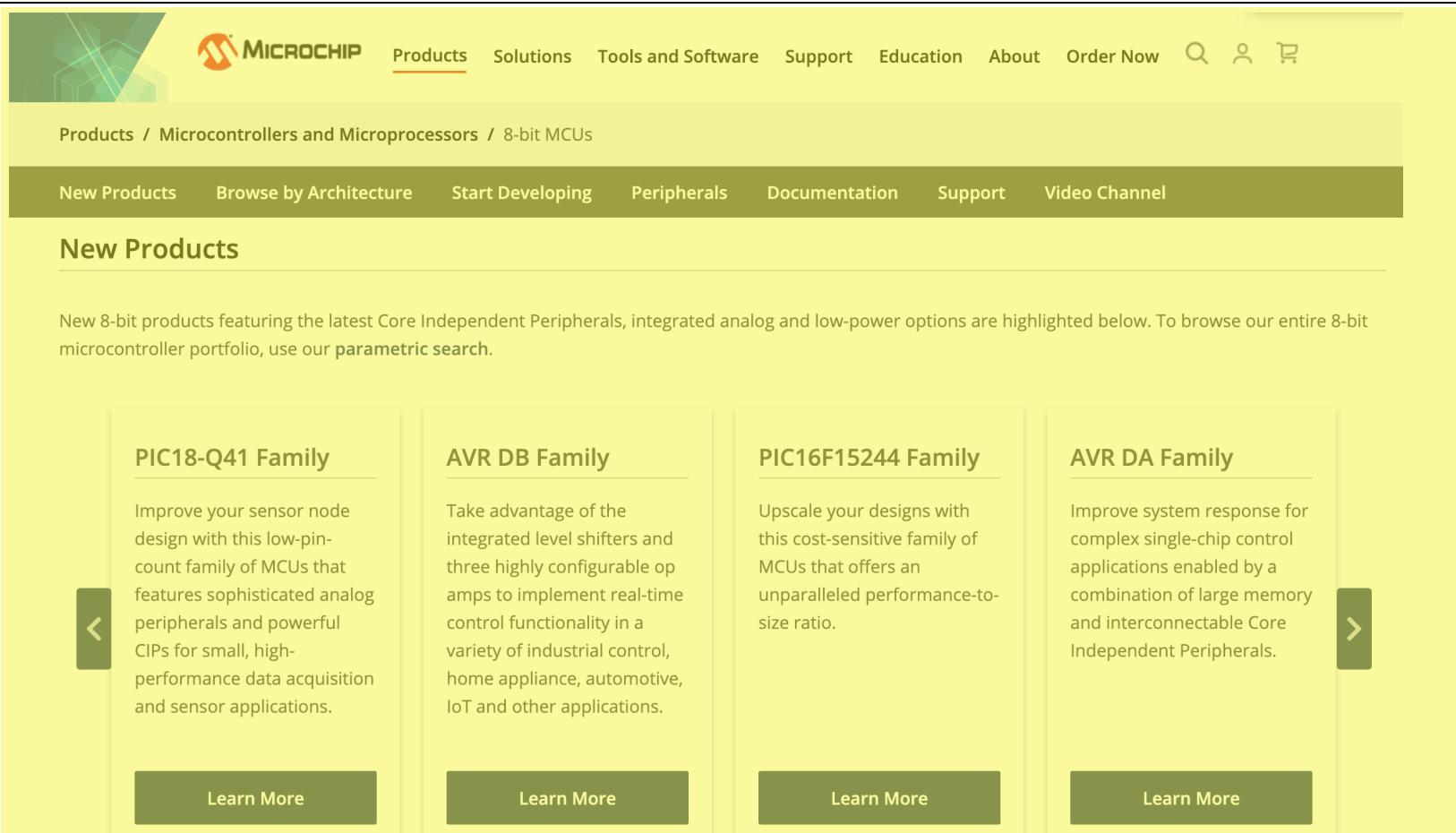
32-bit SAM Microcontrollers (MCU)

CEC 32-bit MCUs

Legacy 32-bit Microcontrollers (MCUs)

Applications, Reference Designs and Solutions

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301



New Products

New 8-bit products featuring the latest Core Independent Peripherals, integrated analog and low-power options are highlighted below. To browse our entire 8-bit microcontroller portfolio, use our [parametric search](#).

PIC18-Q41 Family

Improve your sensor node design with this low-pin-count family of MCUs that features sophisticated analog peripherals and powerful CIPs for small, high-performance data acquisition and sensor applications.

[Learn More](#)

AVR DB Family

Take advantage of the integrated level shifters and three highly configurable op amps to implement real-time control functionality in a variety of industrial control, home appliance, automotive, IoT and other applications.

[Learn More](#)

PIC16F15244 Family

Upscale your designs with this cost-sensitive family of MCUs that offers an unparalleled performance-to-size ratio.

[Learn More](#)

AVR DA Family

Improve system response for complex single-chip control applications enabled by a combination of large memory and interconnectable Core Independent Peripherals.

[Learn More](#)

Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus> (last accessed Jun. 8, 2021).
See also <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus/avr-da>:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows a website for Microchip Technology. At the top, there is a navigation bar with links for Products (underlined), Solutions, Tools and Software, Support, Education, About, and Order Now, along with search and user icons. Below the navigation bar, a breadcrumb trail indicates the current location: Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA. A secondary navigation bar below the breadcrumb trail includes links for Overview, Get Started, Functional Safety, Evaluation Boards, System Features, and Parametric Chart. The main content area features a large banner with the text "AVR® DA Product Family" over a background image of integrated circuit boards. Below the banner, a note states: "See also <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus> (e.g., providing pre-defined shortcuts that enable direct access to the item “AVR® DA”):".

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows a section of the Microchip Technology website under the 'Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs' category. It displays four product families: AVR DB Family, AVR DA Family, ATtiny1627 Family, and ATtiny1607 Family. Each family has a brief description and a 'Learn More' button. Navigation arrows are present on the left and right sides of the grid.

AVR DB Family
Take advantage of the integrated level shifters and three highly configurable op amps to implement real-time control functionality in a variety of industrial control, home appliance, automotive, IoT and other applications.

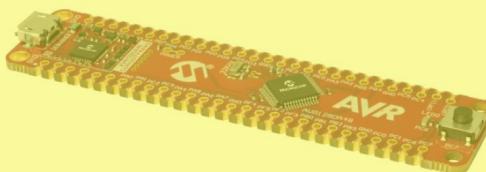
AVR DA Family
Improve system response for complex single-chip control applications enabled by a combination of large memory and interconnectable Core Independent Peripherals.

ATtiny1627 Family
Improve real-time performance with high-speed measurement, or measure small amplitude signals in harsh and noisy environments with the 12-bit differential ADC and Programmable Gain Amplifier (PGA).

ATtiny1607 Family
Improve performance and reduce the complexity of your real-time control applications with high-speed analog and hardware-based Core Independent Peripherals.

See also:

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301



The AVR128DA48 Curiosity Nano Evaluation Kit* (DM164151) is the ideal platform for rapid prototyping with new tinyAVR MCUs. The USB-powered kit features an on-board programmer/debugger that seamlessly integrates with MPLAB® X and Microchip Studio (IDEs). The small form factor makes the board ideal for breadboard soldering, or you can combine it with the Curiosity Nano Base for Click boards™, which features multiple mikroBUS™ sockets so you can easily add sensors, actuators or communications interfaces from Mikroelektronika's extensive selection of Click boards.

- GitHub Projects
- START Projects

**This board is based on the 128 KB 48-pin AVR DA MCU. An evaluation kit with the 64-pin AVR DA is not available.*

[Buy the Board Now](#) [Get Started](#)

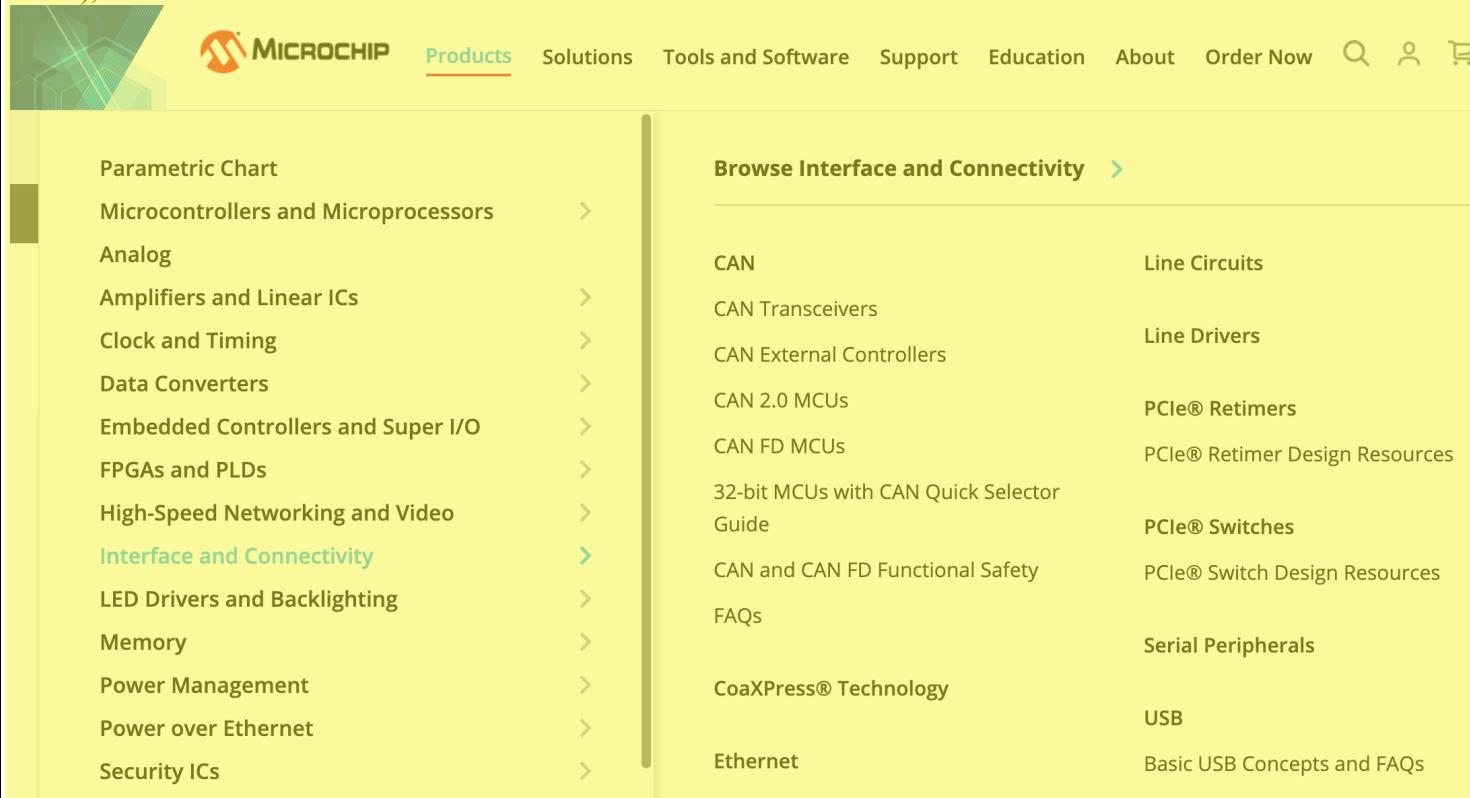
Functional Safety Ready for Safety-Critical Applications

Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus/avr-da>.

As another example, the '301 Accused Instrumentalities provide pre-defined short-cuts enabling direct access to a given menu item

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

(e.g., the '301 Accused Instrumentalities provide pre-defined shortcuts, such as “CAN 2.0 MCUs” that enable direct access to those items), as shown below:



The screenshot shows the Microchip website's navigation bar with links for Products, Solutions, Tools and Software, Support, Education, About, and Order Now. Below the navigation bar, there is a sidebar with a 'Parametric Chart' link and a list of product categories: Microcontrollers and Microprocessors, Analog, Amplifiers and Linear ICs, Clock and Timing, Data Converters, Embedded Controllers and Super I/O, FPGAs and PLDs, High-Speed Networking and Video, Interface and Connectivity, LED Drivers and Backlighting, Memory, Power Management, Power over Ethernet, and Security ICs. To the right of the sidebar, under the 'Interface and Connectivity' heading, there is a list of sub-links: CAN, CAN Transceivers, CAN External Controllers, CAN 2.0 MCUS, CAN FD MCUS, 32-bit MCUs with CAN Quick Selector Guide, FAQs, CoaXPress® Technology, and Ethernet. To the right of these, there are additional links: Line Circuits, Line Drivers, PCIe® Retimers, PCIe® Retimer Design Resources, PCIe® Switches, PCIe® Switch Design Resources, Serial Peripherals, USB, and Basic USB Concepts and FAQs.

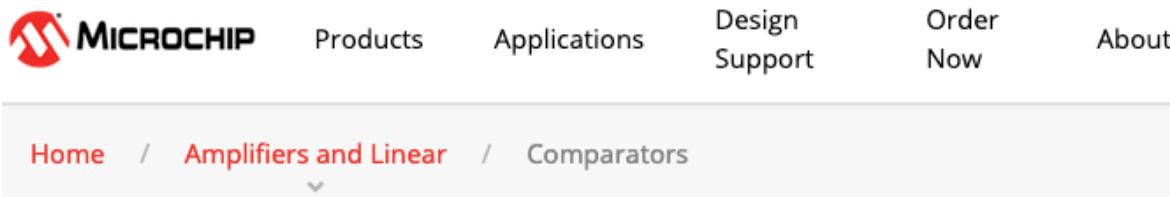
See <https://www.microchip.com/> (last accessed June 8, 2021).

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

dynamically constructing the Active Path when a pre-defined short-cut is executed, with one said active link corresponding to each of the items necessary to access said given item using said graphical user menu system.

The '301 Accused Instrumentalities dynamically construct the Active Path, which has been construed by this Court (Dkt. 34) as a sequence of links dynamically created as the menu system is navigated, when a pre-defined short-cut is executed, with one said active link corresponding to each of the menu items necessary to access said given menu item using said graphical user menu system.

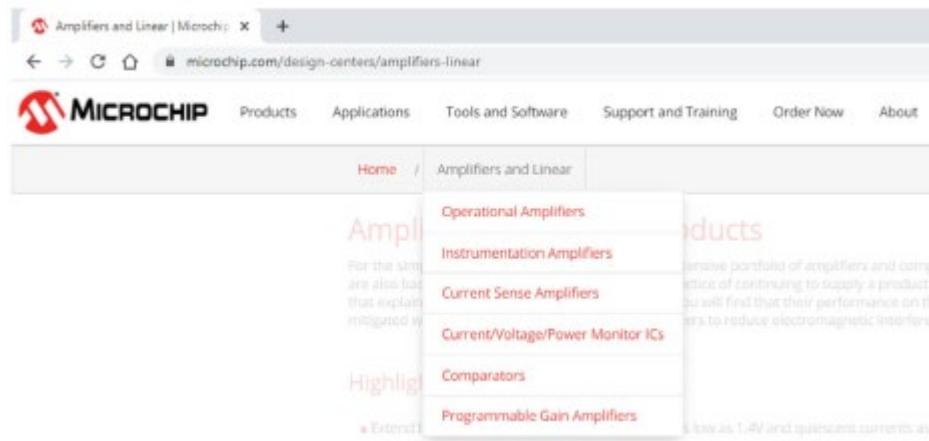
For example, the '301 Accused Instrumentalities dynamically construct the sequence of links dynamically created as the menu system is navigated when a pre-defined short-cut is executed, with one said active link corresponding to each of the menu items necessary to access said given menu item using said graphical user menu system (e.g., the sequence of links dynamically created as a menu item is navigated is automatically constructed when "Amplifiers and Linear" or "Comparators" is executed, with each active link "Amplifiers and Linear" or "Comparators" corresponding to each of the menu items necessary to access the given menu item using the graphical user menu system).



See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

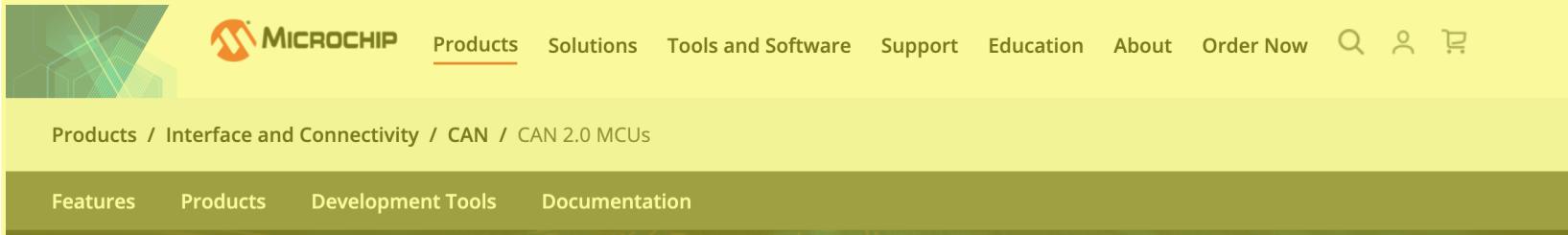
See also MCHP-CADDO_0000935:

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301



The screenshot shows a dropdown menu for 'Amplifiers and Linear' products. The menu items listed are Operational Amplifiers, Instrumentation Amplifiers, Current Sense Amplifiers, Current/Voltage/Power Monitor ICs, Comparators, and Programmable Gain Amplifiers.

As another example, the '301 Accused Instrumentalities dynamically construct the sequence of links dynamically created as the menu system is navigated when a pre-defined short-cut is executed (e.g., when the short-cut corresponding to the link “CAN 2.0 MCUs” is executed), with one said active link (e.g., the link “CAN 2.0 MCUs” in the path “Products / Interface and Connectivity / CAN / CAN 2.0 MCUs”) corresponding to each of the menu items necessary to access said given menu item using said graphical user menu system (e.g., the link “CAN 2.0 MCUs” corresponding to the menu item “CAN 2.0 MCUs”), as shown below:



The screenshot shows the Microchip website with the navigation path highlighted: Products / Interface and Connectivity / CAN / CAN 2.0 MCUs. Below the path, there is a green bar with menu items: Features, Products, Development Tools, and Documentation.

See, e.g., <https://www.microchip.com/en-us/products/interface-and-connectivity/can/can-2-0-mcus>; see also id.:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows the Microchip Technology website's navigation bar and a detailed view of their product categories.

Navigation Bar:

- MICROCHIP
- Products** (highlighted)
- Solutions
- Tools and Software
- Support
- Education
- About
- Order Now
- Search icon
- User icon
- Cart icon

Left Sidebar (Products Menu):

- Parametric Chart
- Microcontrollers and Microprocessors >
- Analog
- Amplifiers and Linear ICs >
- Clock and Timing >
- Data Converters >
- Embedded Controllers and Super I/O >
- FPGAs and PLDs >
- High-Speed Networking and Video >
- Interface and Connectivity** > (highlighted)
- LED Drivers and Backlighting >
- Memory >
- Power Management >
- Power over Ethernet >
- Security ICs >
- Sensors and Motor Drive >
- Services >
- Smart Energy/Metering >

Right Content Area (Interface and Connectivity):

Browse Interface and Connectivity >

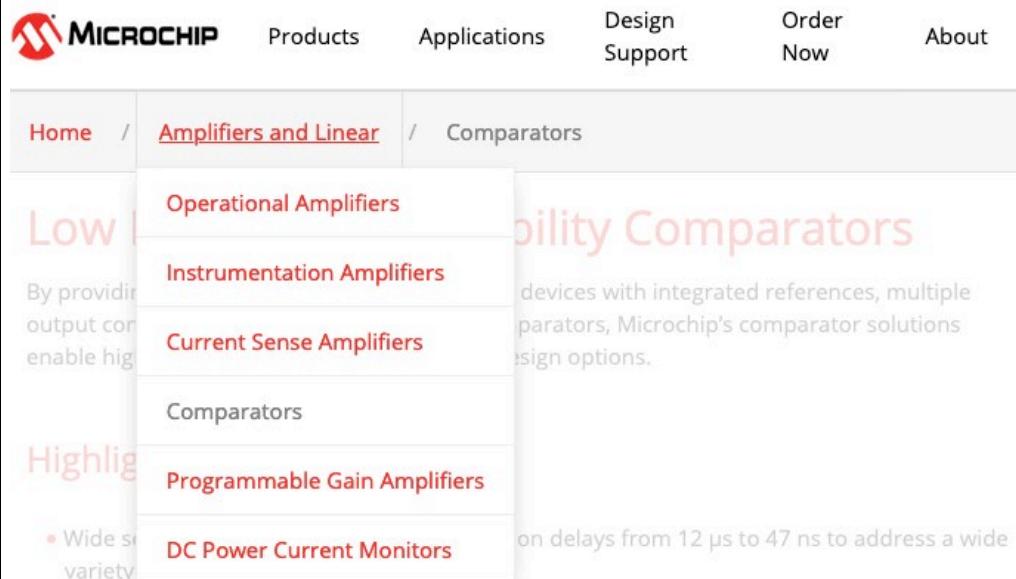
CAN	Line Circuits
CAN Transceivers	Line Drivers
CAN External Controllers	
CAN 2.0 MCUs	PCIe® Retimers
CAN FD MCUs	PCIe® Retimer Design Resources
32-bit MCUs with CAN Quick Selector Guide	PCIe® Switches
CAN and CAN FD Functional Safety	PCIe® Switch Design Resources
FAQs	Serial Peripherals
CoaXPress® Technology	USB
Ethernet	Basic USB Concepts and FAQs
High-Voltage Interface	USB Hubs
INICnet™ Technology	USB-C® Power Delivery Controllers
	USB Bridge Controllers

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

3. The method for navigating according to claim 1, wherein rolling over a selected active link triggers the display of sibling items on the hierarchically subordinate levels associated with said selected active link.

The '301 Accused Instrumentalities roll over a selected active link to trigger the display of sibling items on the hierarchically subordinate levels associated with said selected active link.

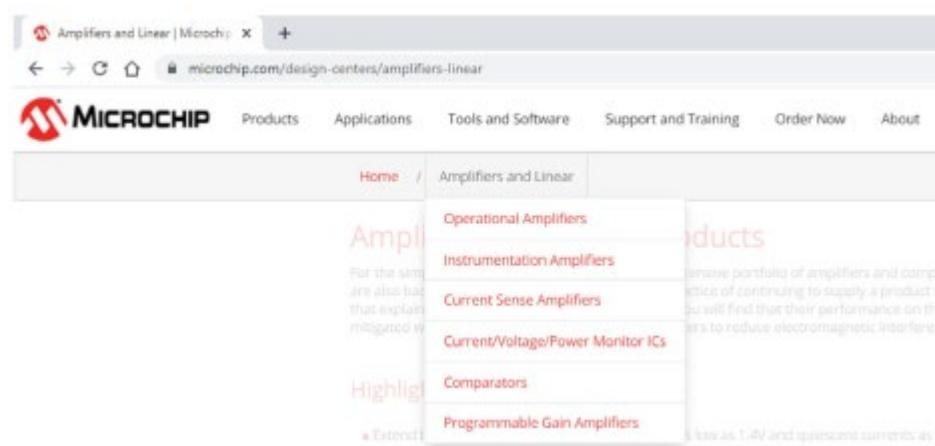
For example, for the '301 Accused Instrumentalities, rolling over a selected active link triggers the display of sibling items on the hierarchically subordinate levels associated with said selected active link (e.g., the '301 Accused Instrumentalities allow rolling over the link "Amplifiers and Linear" to trigger the display of sibling items on the hierarchically subordinate levels associated with the selected active link "Amplifiers and Linear" such as "Operational Amplifiers," "Instrumentation Amplifiers," "Current Sense Amplifiers," "Comparators," "Programmable Gain Amplifiers," and "DC Power Current Monitors") as shown below:



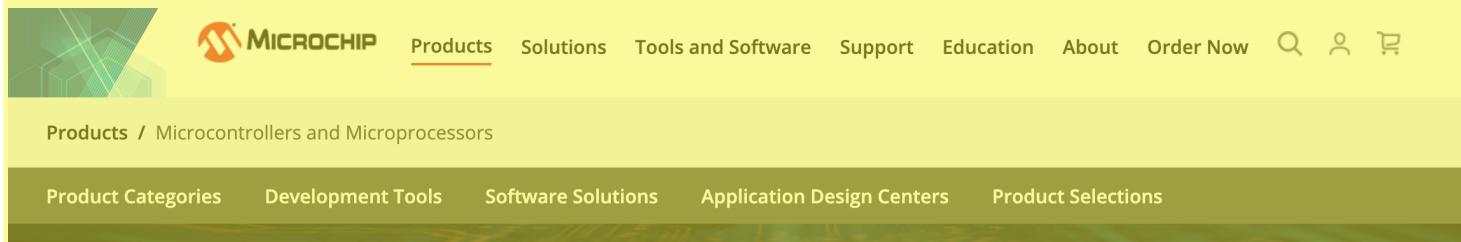
See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

See also MCHP-CADDO_0000935:

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301



As another example, in the '301 Accused Instrumentalities, rolling over a selected active link triggers the display of sibling items on the hierarchically subordinate levels associated with said selected active link (e.g., rolling over and selecting “Microcontrollers and Microprocessors” in “Products / Microcontrollers and Microprocessors / 8-bit MCUs”) to trigger the display of sibling menu items on the hierarchically subordinate levels (e.g., “Product Categories,” “Developments,” “Software Solutions,” “Application Design Centers,” and “Product Selections”), as shown below:



See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors> (last accessed Jun. 8, 2021).

To the extent Microchip contends that the '301 Accused Instrumentalities do not literally meet the limitation of “rolling over a selected active link triggers the display of sibling items on the hierarchically subordinate levels associated with said selected active link,” the limitation is met under the doctrine of equivalents by the '301 Accused Instrumentalities because they perform substantially the same

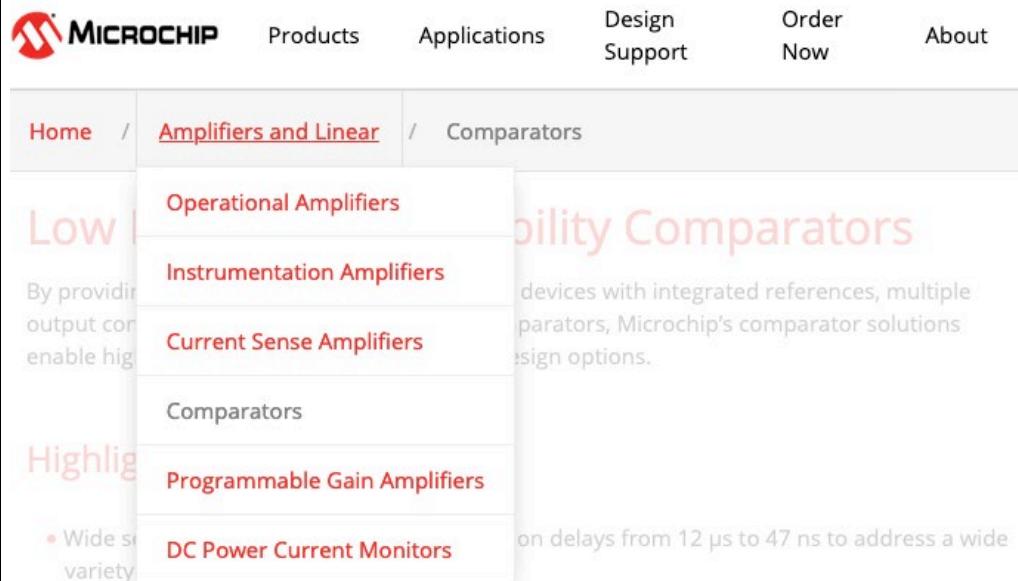
Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

function (displaying the sibling menu items on the hierarchically subordinate levels such as “Product Categories,” “Developments,” “Software Solutions,” “Application Design Centers,” and “Product Selections”) in substantially the same way (e.g., displaying the sibling menu items that are on the hierarchically subordinate levels associated with the link “Microcontrollers and Microprocessors”) to produce substantially the same result (e.g., sibling menu items on the level associated with the link “Microcontrollers and Microprocessors” are displayed and available for selection).

4. The method for navigating according to claim 1, wherein selecting a given active link triggers the execution of a function associated with said given active link.

The '301 Accused Instrumentalities select a given active link to trigger the execution of a function associated with said given active link.

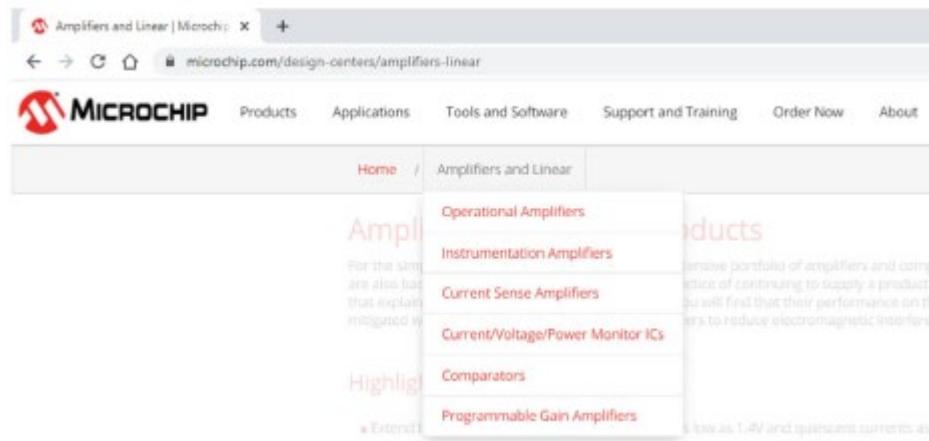
For example, the '301 Accused Instrumentalities allow selecting a given active link to trigger the execution of a function associated with said given active link (e.g., selecting a given active link such as "Amplifiers and Linear" triggers the execution of a function, such as displaying sibling menus (e.g., "Operational Amplifiers," "Instrumentation Amplifiers," "Current Sense Amplifiers," "Comparators," "Programmable Gain Amplifiers," and "DC Power Current Monitors") or directing user to certain content) as shown below:



See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

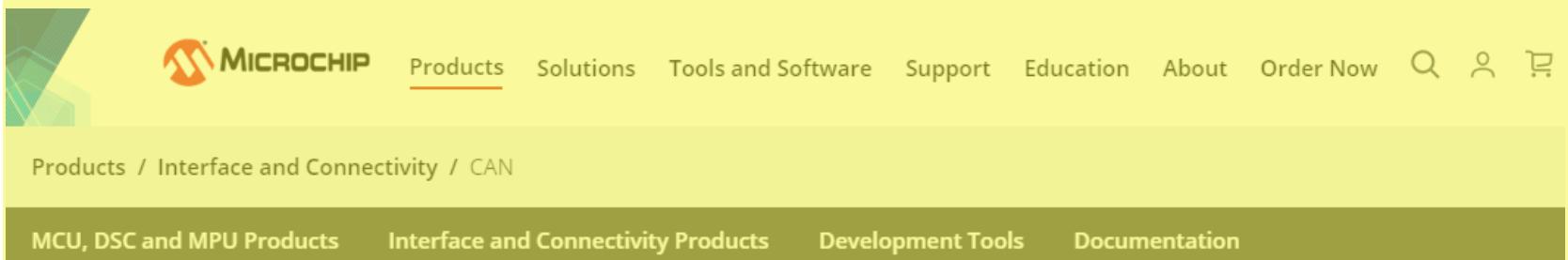
See also MCHP-CADDO_0000935.

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301



The screenshot shows a dropdown menu for 'Operational Amplifiers' on the Microchip website. The menu includes options like 'Instrumentation Amplifiers', 'Current Sense Amplifiers', 'Current/Voltage/Power Monitor ICs', 'Comparators', and 'Programmable Gain Amplifiers'. The 'Operational Amplifiers' option is highlighted.

As another example, selecting a given active link triggers the execution of a function associated with said given active link (*e.g.*, selecting a given active link such as “CAN” in the path “Products / Interface and Connectivity / CAN / CAN 2.0 MCUs” triggers the execution of a function, such as displaying sibling menus (*e.g.*, “MCU, DSC and MPU Products,” “Interface and Connectivity Products,” “Development Tools,” and “Documentation” associated with “CAN”) or directing user to certain content such as content under the link “CAN”), as shown below:



The screenshot shows the Microchip website with the URL <https://www.microchip.com/en-us/products/interface-and-connectivity/can>. The page title is "Products / Interface and Connectivity / CAN". Below the title, there are four navigation links: "MCU, DSC and MPU Products", "Interface and Connectivity Products", "Development Tools", and "Documentation".

See, e.g., <https://www.microchip.com/en-us/products/interface-and-connectivity/can> (last accessed June 8, 2021); see also

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

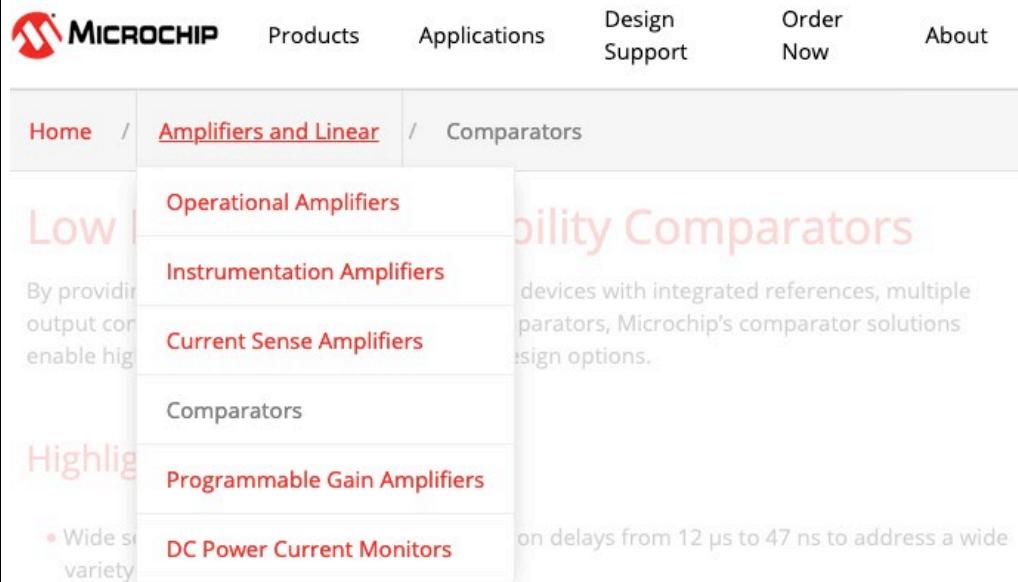
The screenshot shows the Microchip website's navigation bar with links for Products, Solutions, Tools and Software, Support, Education, About, and Order Now. Below the navigation is a breadcrumb trail: Products / Interface and Connectivity / CAN / CAN 2.0 MCUs. Underneath this is a secondary navigation bar with links for Features, Products, Development Tools, and Documentation. The main content area features a large banner with the text "Microcontrollers with Integrated CAN". At the bottom of the page, there is a note: "See <https://www.microchip.com/en-us/products/interface-and-connectivity/can/can-2-0-mcus> (last accessed Jun. 8, 2021)."

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

5. The method for navigating according to claim 1, wherein selecting a given active link triggers display of information associated with said given active link.

The '301 Accused Instrumentalities select a given active link to trigger the display of information associated with said given active link.

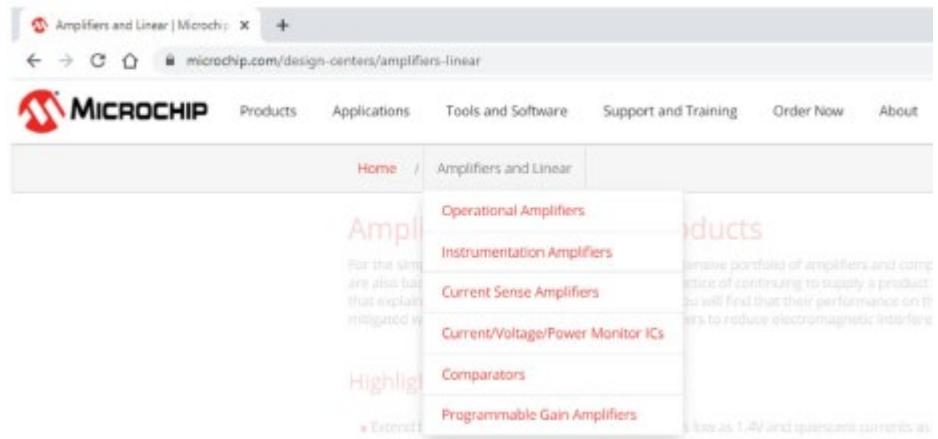
For example, the '301 Accused Instrumentalities allow selecting a given active link to trigger the display of information associated with said given active link (e.g., the '301 Accused Instrumentalities allow selecting the link "Amplifiers and Linear" to trigger display of information (e.g., displaying "Operational Amplifiers," "Instrumentation Amplifiers," "Current Sense Amplifiers," "Comparators," "Programmable Gain Amplifiers," and "DC Power Current Monitors") associated with the link "Amplifiers and Linear") as shown below:



See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

See also MCHP-CADDO_0000935:

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301



As another example, selecting a given active link triggering the execution of a function associated with said given active link (*e.g.*, selecting a given active link such as “CAN” in the path “Products / Interface and Connectivity / CAN / CAN 2.0 MCUs” triggers the execution of a function, such as displaying sibling menus (*e.g.*, “MCU, DSC and MPU Products,” “Interface and Connectivity Products,” “Development Tools,” and “Documentation” associated with “CAN”) or directing user to certain content such as content under the link “CAN”), as shown below:

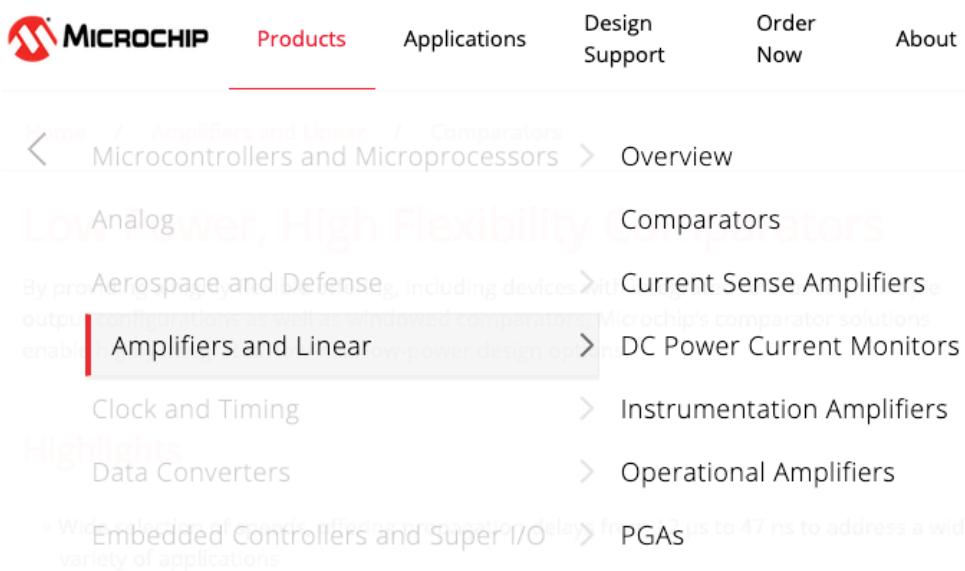


Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

9. A method for navigating within a multi-level hierarchical information structure where each level in the structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level, said method comprising the steps of:

To the extent that the preamble of claim 9 is a limitation, the '301 Accused Instrumentalities provide, or support the provision of, a method for navigating within a multi-level hierarchical information structure where each level in the structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level.

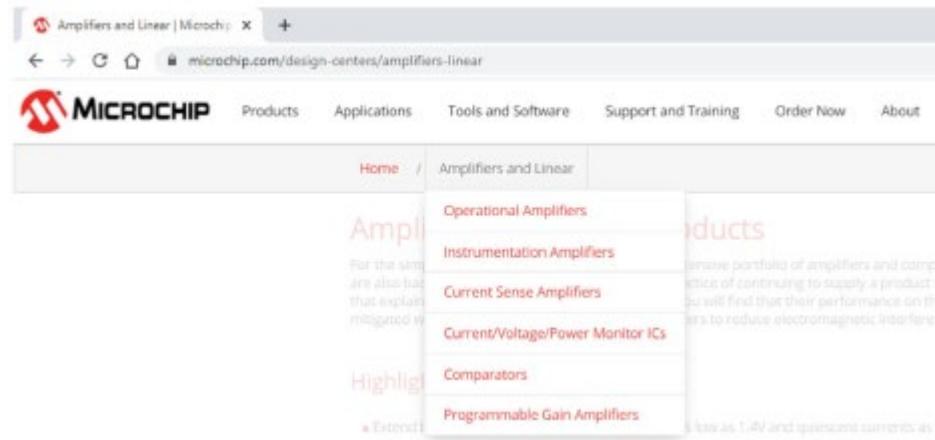
For example, the '301 Accused Instrumentalities provide a method for navigating within a multi-level hierarchical information structure where each level in the structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level (*e.g.*, the '301 Accused Instrumentalities provide a method for navigating within a multi-level hierarchical collapsing menu structure where each level in the information structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level (*e.g.*, "Products" includes "Amplifiers and Linear," which includes "Operational Amplifiers," "Instrumentation Amplifiers," "Current Sense Amplifiers," "Comparators," "Programmable Gain Amplifiers," and "DC Power Current Monitors")) as shown below:



See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

See also MCHP-CADDO_0000935:



Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows a web browser displaying the Microchip Technology website at microchip.com/design-centers/microcontrollers. The page features a large banner with the text "Effortless Design with Microchip" and "Easy-to-Use Embedded Intelligence Supported by World-Class Development Tools and Software". A "GET STARTED" button is visible. Below the banner, the navigation menu includes "Products", "Applications", "Tools and Software", "Support and Training", "Order Now", and "About". A sidebar on the left lists categories such as "Microcontrollers", "Effortless", "8-bit MCUs", "16-bit MCUs", "32-bit MCUs", "MPUs", and "Development Tools". A dropdown menu under "Applications" lists "Automotive", "Graphics Display", "Intelligent Power", "Low Power", "Motor Control", "Security", and "Touch and Gesture". The main content area discusses the benefits of using Microchip's products for modern electronics design.

See MCHP-CADDO-0000931.

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

As another example, , the '301 Accused Instrumentalities provide a method for navigating within a multi-level hierarchical information structure where each level in the structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level (e.g., the '301 Accused Instrumentalities provide a method for navigating within a multi-level hierarchical collapsing menu structure where each level in the information structure contains plural items, each said item being at least one of a function, a pointer to a location, and a pointer to another level (e.g., “Products” includes “Amplifiers and Linear,” which includes “Operational Amplifiers ICs,” “Instrumentation Amplifiers ICs,” “Current Sense Amplifiers ICs,” “Comparators ICs,” “Programmable Gain Amplifiers ICs,” and “Current/Voltage/Power Monitor ICs”)) as shown below:

The screenshot shows the Microchip website's navigation bar and a detailed product category tree. The navigation bar includes links for Products (which is underlined), Solutions, Tools and Software, Support, Education, About, Order Now, a search icon, a user icon, and a shopping cart icon. Below the navigation bar, a sidebar on the left lists various product categories: Parametric Chart, Microcontrollers and Microprocessors, Analog, Amplifiers and Linear ICs (which is expanded to show Comparator ICs, Instrumentation Amplifier ICs, Current Sense Amplifier ICs, Operational Amplifier ICs, Current/Voltage/Power Monitor ICs, and Programmable Gain Amplifier ICs), Clock and Timing, Data Converters, Embedded Controllers and Super I/O, FPGAs and PLDs, High-Speed Networking and Video, Interface and Connectivity, LED Drivers and Backlighting, Memory, Power Management, and Power over Ethernet. The main content area displays the expanded "Amplifiers and Linear ICs" category.

See <https://www.microchip.com/en-us/products/amplifiers-and-linear-ics/comparator-ics> (last accessed June 8, 2021).

displaying a graphic element representing a root of the hierarchical information structure;

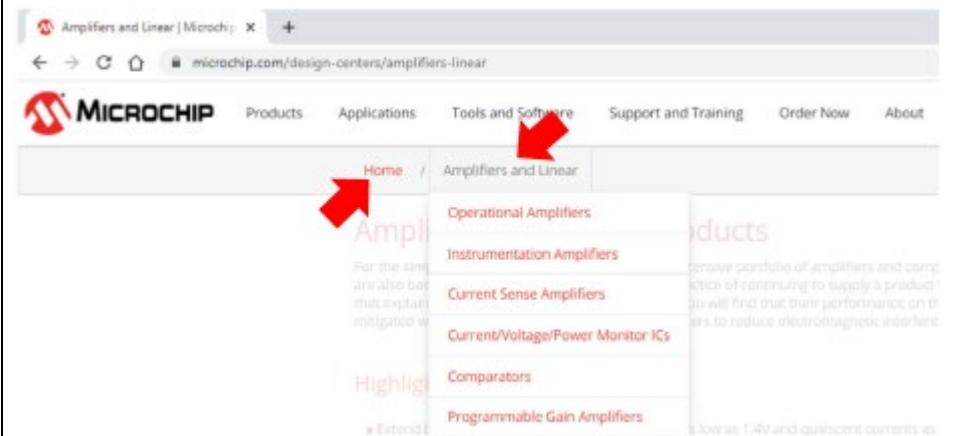
The '301 Accused Instrumentalities display a graphic element representing a root of the hierarchical information structure.

For example, the '301 Accused Instrumentalities provide displaying a graphic element representing a root of the hierarchical information structure (e.g., the '301 Accused Instrumentalities display a number of graphic elements each representing a root of the hierarchical information structure) as shown below:



By providing a highly-flexible offering, including devices with integrated references, multiple output configurations as well as windowed comparators. Microchip's comparator solutions

See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020) (annotated).



See MCHP-CADDO_0000935 (annotated).

As another example, the '301 Accused Instrumentalities provide displaying a graphic element (e.g., graphic element "Microcontrollers and Microprocessors >") representing a root of the hierarchical information structure as shown below:



[Products](#)

[Solutions](#)

[Tools and Software](#)

[Support](#)

[Education](#)

[About](#)

[Order Now](#)



Parametric Chart

[Microcontrollers and Microprocessors >](#)

Analog

Amplifiers and Linear ICs

Clock and Timing

Data Converters

Embedded Controllers and Super I/O

FPGAs and PLDs

High-Speed Networking and Video

Interface and Connectivity

LED Drivers and Backlighting

Memory Products

Power Management

Power over Ethernet

Power Management

Browse Microcontrollers and Microprocessors >

8-bit MCUs

32-bit MCUs

PIC® MCUs

32-bit PIC Microcontrollers (MCUs)

AVR® MCUs

32-bit SAM Microcontrollers (MCU)

8051 MCUs

CEC 32-bit MCUs

Peripherals

Legacy 32-bit Microcontrollers (MCUs)

Functional Safety

Applications, Reference Designs and Solutions

PIC18 to PIC24 Migration

32-bit Embedded Security

16-bit MCUs

32-bit Functional Safety

PIC24F MCUs - 16 MIPS

Softpacks

dsPIC33C Digital Signal Controllers

Third-Party Partners

dsPIC33E DSCs - 70 MIPS

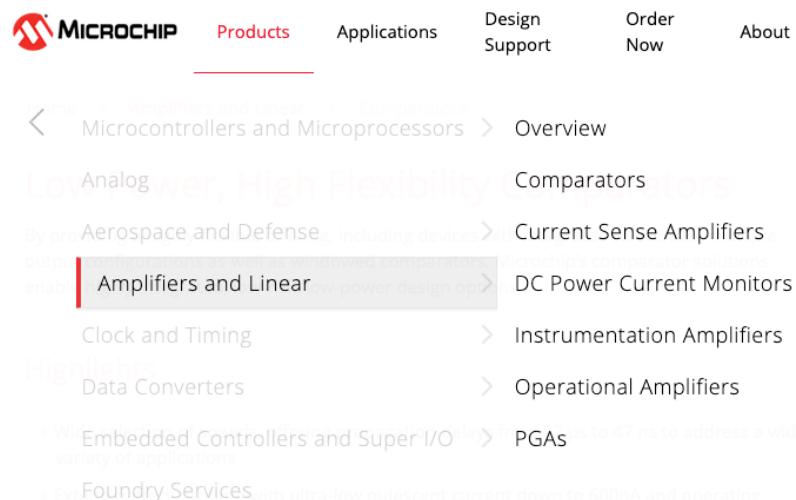
See <https://www.microchip.com/> (last accessed Jun. 8, 2021)

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

browsing the hierarchical information structure by rolling over said graphic element using a pointing device, wherein browsing results in the display of sibling items or hierarchically subordinate items;

The '301 Accused Instrumentalities browse the hierarchical information structure by rolling over said graphic element using a pointing device, wherein browsing results in the display of sibling items or hierarchically subordinate items.

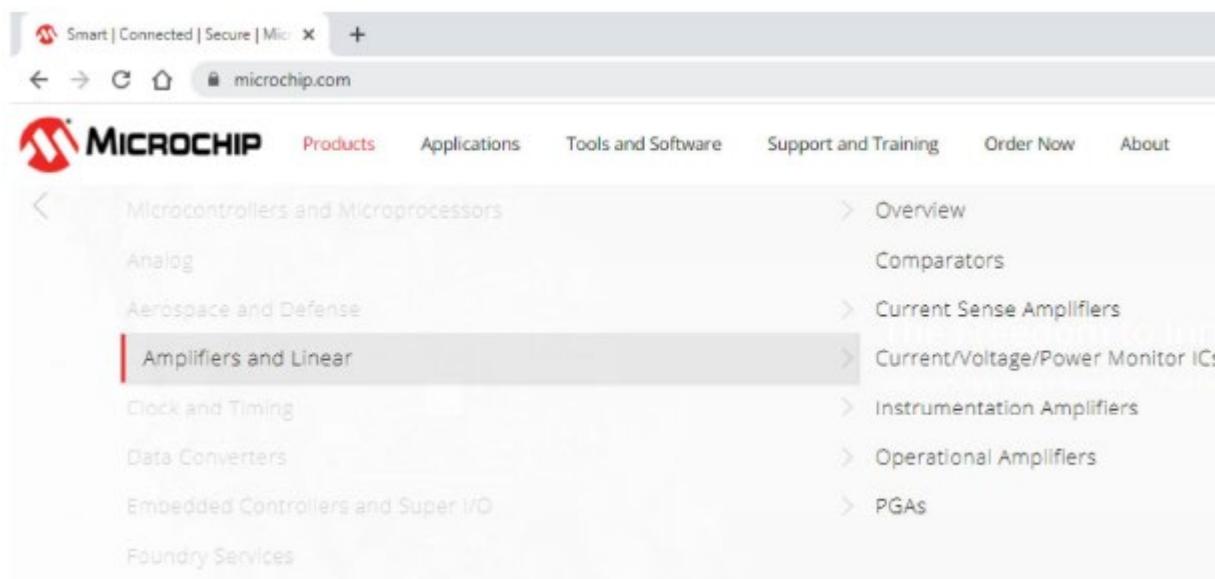
For example, the '301 Accused Instrumentalities allow browsing the hierarchical information structure by rolling over said graphic element using a pointing device (*e.g.*, by rolling over, via a mouse, “Applications and Linear” or the “down arrow” or the “side arrow”), wherein browsing results in the display of sibling items or hierarchically subordinate items (*e.g.*, browsing results in the display of items such as “Operational Amplifiers,” “Instrumentation Amplifiers,” “Current Sense Amplifiers,” “Comparators,” “PGAs,” and “DC Power Current Monitors”) as shown below:



See, e.g., <https://www.microchip.com/design-centers/amplifiers-linear/comparators> (last visited Feb. 10, 2020).

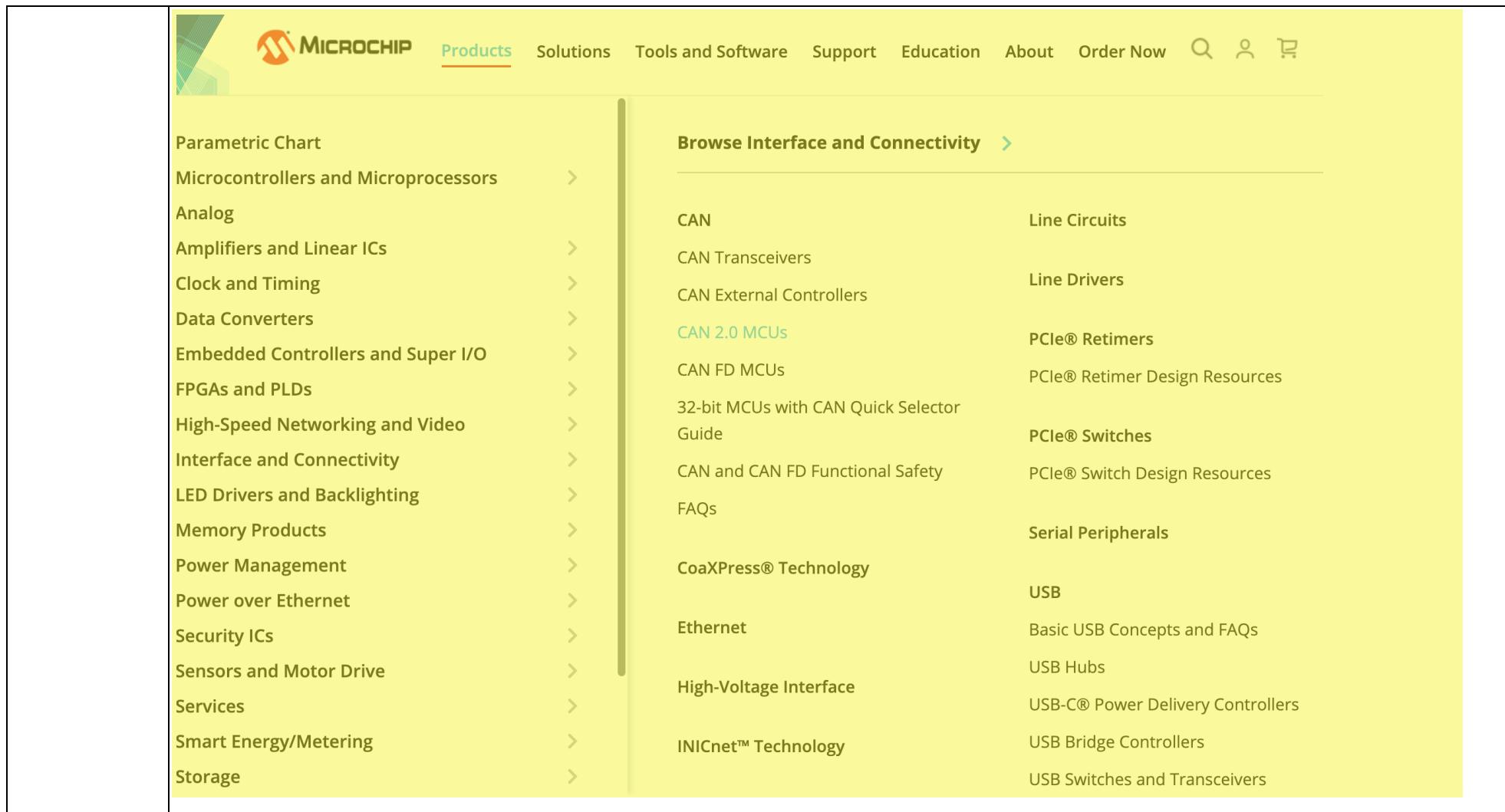
See also MCHP-CADDO_0000934:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301



The screenshot shows a portion of the Microchip website's navigation bar and a dropdown menu. The navigation bar includes links for Smart, Connected, Secure, Microchip, Products, Applications, Tools and Software, Support and Training, Order Now, and About. The main menu item 'Products' is selected, highlighted in red. A dropdown menu for 'Microcontrollers and Microprocessors' is open, listing several categories: Analog, Aerospace and Defense, Amplifiers and Linear, Clock and Timing, Data Converters, Embedded Controllers and Super I/O, and Foundry Services. The 'Amplifiers and Linear' category is also highlighted in red. To the right of this menu, a secondary level of sub-menu items is visible, including Overview, Comparators, Current Sense Amplifiers, Current/Voltage/Power Monitor ICs, Instrumentation Amplifiers, Operational Amplifiers, and PGAs. The entire screenshot is enclosed in a light gray border.

As another example, the '301 Accused Instrumentalities allow browsing the hierarchical information structure by rolling over said graphic element using a pointing device (e.g., by rolling over, via a mouse, "Interface and Connectivity"), wherein browsing results in the display of sibling items or hierarchically subordinate items (e.g., browsing results in the display of sibling or subordinate items such as "CAN" and "CAN 2.0 MCUs") as shown below:



The screenshot shows the Microchip Technology website's navigation bar and a detailed view of the 'Products' section under 'Interface and Connectivity'.

Navigation Bar:

- MICROCHIP
- Products** (highlighted)
- Solutions
- Tools and Software
- Support
- Education
- About
- Order Now
- Search icon
- User icon
- Cart icon

Left Sidebar (Parametric Chart):

- Parametric Chart
- Microcontrollers and Microprocessors >
- Analog >
- Amplifiers and Linear ICs >
- Clock and Timing >
- Data Converters >
- Embedded Controllers and Super I/O >
- FPGAs and PLDs >
- High-Speed Networking and Video >
- Interface and Connectivity >
- LED Drivers and Backlighting >
- Memory Products >
- Power Management >
- Power over Ethernet >
- Security ICs >
- Sensors and Motor Drive >
- Services >
- Smart Energy/Metering >
- Storage >

Browse Interface and Connectivity:

- CAN** > Line Circuits
- CAN Transceivers
- CAN External Controllers
- CAN 2.0 MCUs** > Line Drivers
- CAN FD MCUs
- 32-bit MCUs with CAN Quick Selector Guide
- CAN and CAN FD Functional Safety
- FAQs
- CoaXPress® Technology** > PCIe® Retimers
- Ethernet > PCIe® Switches
- High-Voltage Interface > PCIe® Switch Design Resources
- INICnet™ Technology** > Serial Peripherals
- USB > USB
- Basic USB Concepts and FAQs
- USB Hubs
- USB-C® Power Delivery Controllers
- USB Bridge Controllers
- USB Switches and Transceivers

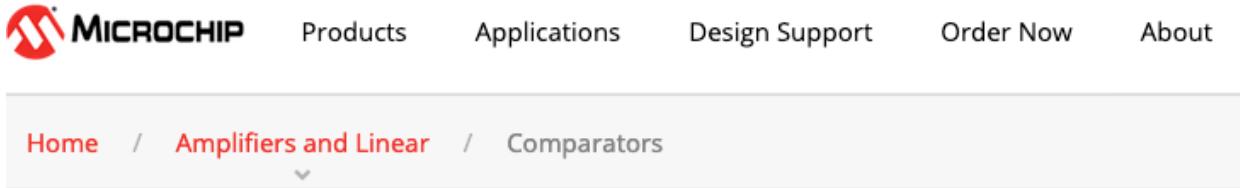
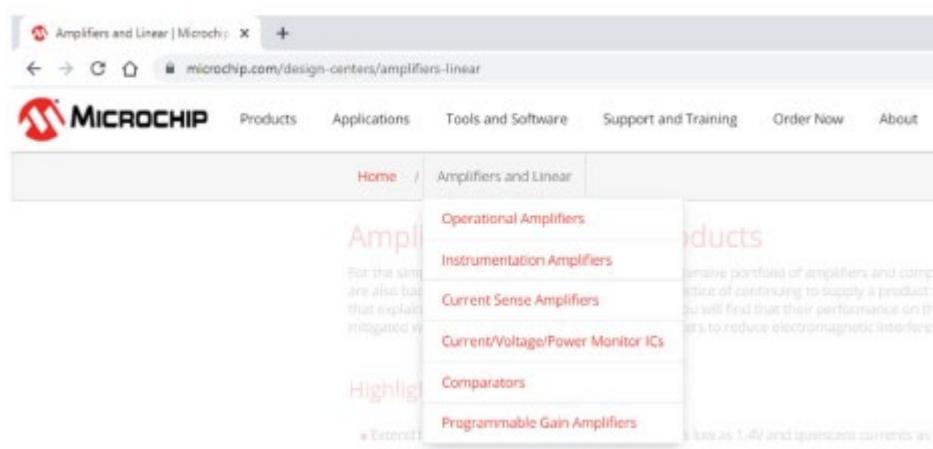
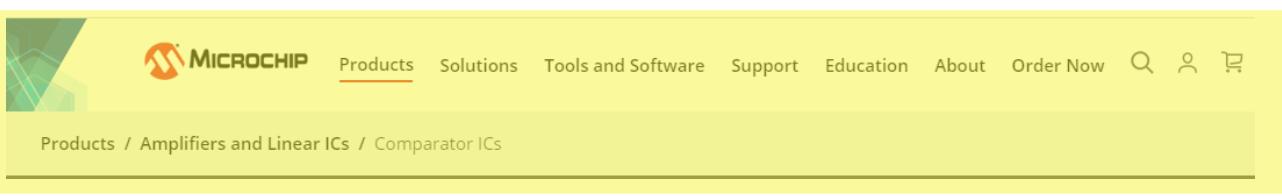
Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

<https://www.microchip.com/> (last accessed Jun. 8, 2021); *see also:*

The screenshot shows the Microchip website's navigation bar with links for Products, Solutions, Tools and Software, Support, Education, About, and Order Now. Below the navigation bar, a breadcrumb trail shows Products / Interface and Connectivity / CAN / CAN 2.0 MCUs. A secondary navigation bar below the breadcrumb trail includes Features, Products, Development Tools, and Documentation. The main content area features a large banner with the text "Microcontrollers with Integrated CAN".

<https://www.microchip.com/en-us/products/interface-and-connectivity/can/can-2-0-mcus> (last accessed Jun. 8, 2021).

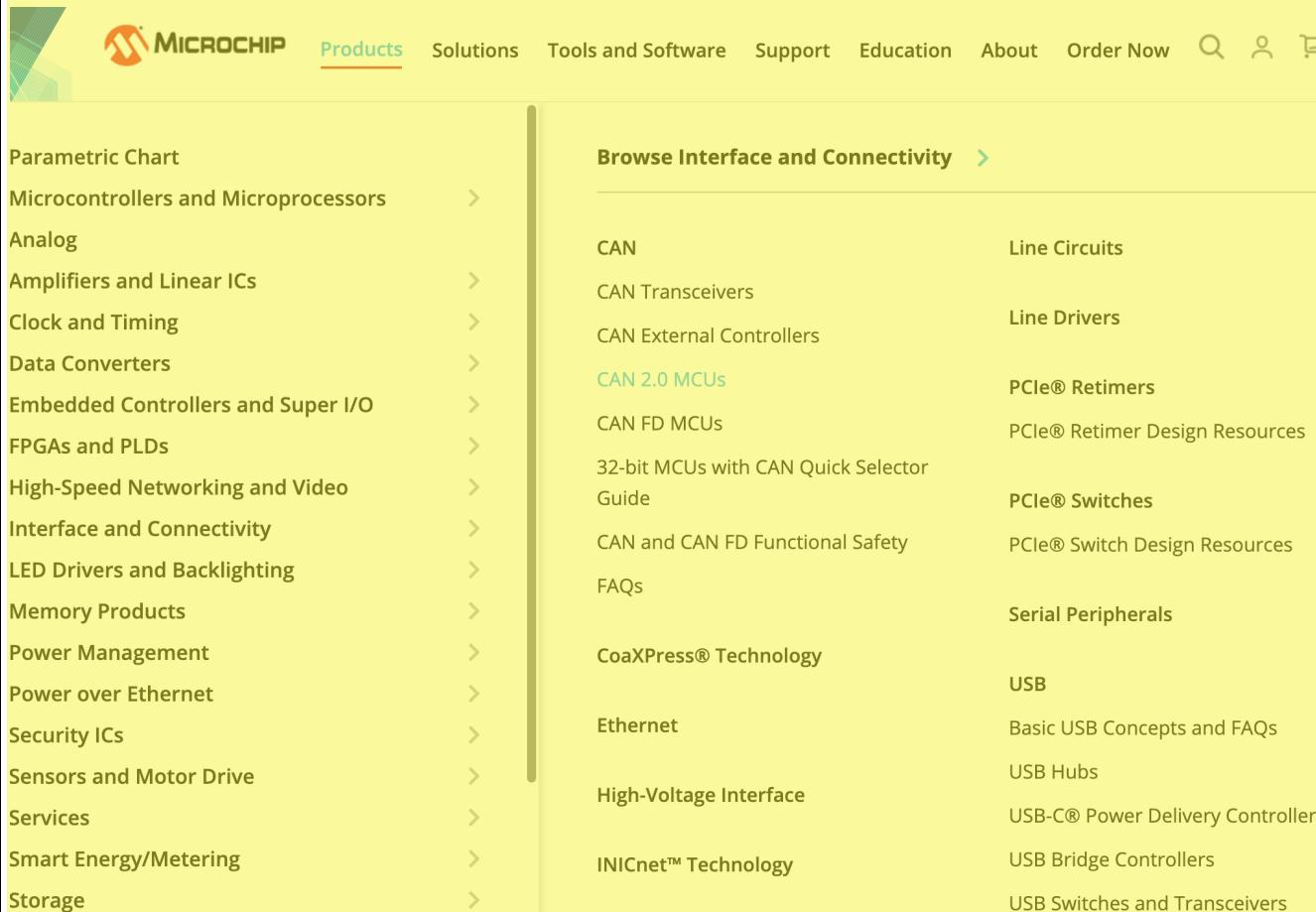
Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

<p>selecting one of the displayed items;</p>	<p>The '301 Accused Instrumentalities selects one of the displayed items.</p> <p>For example, the '301 Accused Instrumentalities allow selecting one of the displayed items (<i>e.g.</i>, selecting “Amplifiers and Linear”).</p>  <p><i>See, e.g.</i>, https://www.microchip.com/design-centers/amplifiers-linear/comparators (last visited Feb. 10, 2020).</p>  <p><i>See also</i> MCHP-CADDO_0000935:</p> 
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Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

See also <https://www.microchip.com/en-us/products/amplifiers-and-linear-ics/comparator-ics> (last accessed June 8, 2021).

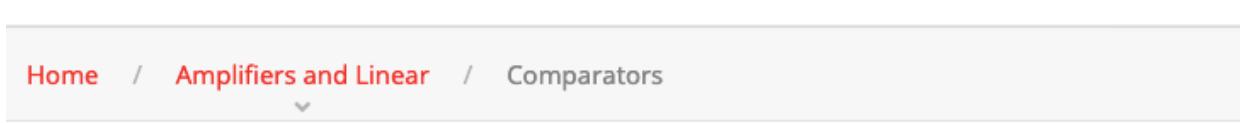
See also <https://www.microchip.com/> (last accessed Jun. 8, 2021) (selecting “CAN 2.0 MCUs”);



The screenshot shows the Microchip website's navigation bar with the 'Products' menu item underlined in red. Below the navigation bar, there is a sidebar on the left containing a 'Parametric Chart' and a list of product categories. To the right of the sidebar, the main content area is titled 'Browse Interface and Connectivity' and lists various interface and connectivity technologies.

Category	Sub-Category	Description
Microcontrollers and Microprocessors	CAN	Line Circuits
	CAN Transceivers	
	CAN External Controllers	Line Drivers
	CAN 2.0 MCUs	PCIe® Retimers
	CAN FD MCUs	PCIe® Retimer Design Resources
	32-bit MCUs with CAN Quick Selector Guide	PCIe® Switches
	CAN and CAN FD Functional Safety	PCIe® Switch Design Resources
	FAQs	Serial Peripherals
	CoaXPress® Technology	USB
	Ethernet	Basic USB Concepts and FAQs
	High-Voltage Interface	USB Hubs
	INICnet™ Technology	USB-C® Power Delivery Controllers
		USB Bridge Controllers
		USB Switches and Transceivers

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

<p>dynamically constructing an Active Path as a sequence of active links as items are selected, with one said active link corresponding to each of the items selected, said active links providing direct access to one of a function, corresponding level and item without the need to navigate from the root of the hierarchical information structure;</p>	<p>The '301 Accused Instrumentalities dynamically construct an Active Path, which has been construed by this Court (Dkt. 34) as a sequence of links dynamically created as a menu item is navigated, as a sequence of active links as items are selected, with one said active link corresponding to each of the items selected, said active links providing direct access to one of a function, corresponding level and item without the need to navigate from the root of the hierarchical information structure.</p> <p>For example, the '301 Accused Instrumentalities dynamically construct a sequence of links dynamically created as a menu item is navigated (e.g., the '301 Accused Instrumentalities dynamically constructed sequence of links dynamically created as a menu item is navigated (e.g., "Amplifiers and Linear—Comparators") as a sequence of active links as items are selected (e.g., as "Amplifiers and Linear" and "Comparators" are selected)), with one said active link corresponding to each of the items selected, said active links providing direct access to one of a function, corresponding level and item without the need to navigate from the root of the hierarchical information structure (e.g., the '301 Accused Instrumentalities' sequence of links dynamically created as a menu item is navigated "Amplifiers and Linear—Comparators" corresponds to each of the items sequentially selected, including "Amplifiers and Linear" and "Comparators"), as shown below:</p>  <p><i>See, e.g., https://www.microchip.com/design-centers/amplifiers-linear/comparators (last visited Feb. 10, 2020).</i></p> <p><i>See also MCHP-CADDO_0000935:</i></p>
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Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows a web browser window with the URL microchip.com/design-centers/amplifiers-linear. The page is titled "Amplifiers and Linear". A sidebar on the left lists categories: Operational Amplifiers, Instrumentation Amplifiers, Current Sense Amplifiers, Current/Voltage/Power Monitor ICs, Comparators, and Programmable Gain Amplifiers. The main content area discusses the benefits of using integrated amplifiers and highlights a range of products.

See also <https://www.microchip.com/en-us/products/amplifiers-and-linear-ics/comparator-ics> (last accessed June 8, 2021) below:

The screenshot shows a web browser window with the URL <https://www.microchip.com/en-us/products/amplifiers-and-linear-ics/comparator-ics>. The page is titled "Products / Amplifiers and Linear ICs / Comparator ICs". The navigation bar includes links for Products, Solutions, Tools and Software, Support, Education, About, Order Now, and a search icon.

See also MCHP-CADDO_0001040-41:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

```
319 <div class="breadcrumbs-open-btn"><span>Menu</span></div>
320 <div class="breadcrumbs">
321     <div class="breadcrumbs-top-bar">
322         <span class="breadcrumbs-close-btn">x</span>
323     </div>
324
325     <div class="crumbs-wrapper">
326         <div class="crumb">
327             <div class="crumb-top">
328                 <a href="/">Home</a>
329             </div>
330         </div>
331         <span class="breadcrumbs-separator">/</span>
332
333         <div class="crumb has-menu">
334             <div class="crumb-top current">
335                 <a href="/design-centers/amplifiers-linear">Amplifiers
336                 and Linear</a>
337                 <div class="open-menu"><i class="fa fa-angle-down">
338                     </div>
339             <ul>
340                 <li class="">
341                     <a class=" " href="/design-centers/amplifiers-linear/operational-amplifiers">Operational Amplifiers</a>
342                 </li>
343                 <li class="">
344                     <a class=" " href="/design-centers/amplifiers-linear/instrumentation-amplifiers">Instrumentation Amplifiers</a>
345                 </li>
346                 <li class="">
347                     <a class=" " href="/design-centers/amplifiers-linear/current-sense-amplifiers">Current Sense Amplifiers</a>
348                 </li>
349             </ul>
350         </div>
351     </div>
352 
```

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

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349      <a class="" href="/design-centers/amplifiers-linear/current-voltage-p
ower-monitors">Current/Voltage/Power Monitor ICs</a>
350      </li>
351      <li class="">
352          <a class="" href="/design-centers/amplifiers-linear/comparators">Comp
arators</a>
353          </li>
354          <li class="">
355              <a class="" href="/design-centers/amplifiers-linear/programmable-gain
-amplifiers">Programmable Gain Amplifiers</a>
356          </li>
357      </ul>
358  </div>
359
360  </div>
361 </div>
362 <div class="breadcrumbs-curtain"></div>
363
364 <div class="row" data-sf-element="Row">
```

As another example, the '301 Accused Instrumentalities dynamically construct a sequence of links dynamically created as a menu item is navigated (e.g., links in the path “Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA” are dynamically created as their corresponding menu item is navigated) as a sequence of active links as items are selected (e.g., as menu items corresponding to the path “Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA” are selected), with one said active link corresponding to each of the items selected (e.g., each link in “Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA” corresponds to an item selected), said active links providing direct access to one of a function, corresponding level and item without the need to navigate from the root of the hierarchical information structure (e.g., the links in “Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA” provide direct access to “Overview,” “Get Started,” “Functional Safety,” “Evaluation Boards,” “System Features,” and “Parametric Chart”, or direct access to content, level, or items) as shown below:

The screenshot shows the Microchip website for the AVR® DA Product Family. At the top, there is a navigation bar with links for Products (underlined), Solutions, Tools and Software, Support, Education, About, Order Now, and a search icon. Below the navigation bar, the breadcrumb path is Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA. A secondary navigation bar below the breadcrumb path includes links for Overview, Get Started, Functional Safety, Evaluation Boards, System Features, and Parametric Chart. The main title "AVR® DA Product Family" is displayed prominently in large white text against a background of abstract green circuit board patterns. Below the title, a paragraph of text reads: "See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus/avr-da> (last accessed Jun. 8, 2021)." A "See also:" section follows, featuring a link to the Products / Microcontrollers and Microprocessors page. This section includes a secondary navigation bar with links for Product Categories, Development Tools, Software Solutions, Application Design Centers, and Product Selections. Below this are four call-to-action buttons: "Explore 8-bit MCUs" (green), "Explore 16-bit MCUs/DSCs" (dark grey), "Explore 32-bit MCUs" (dark grey), and "Explore MPUs" (dark grey). At the bottom of the page, the text "Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors>." is present.

Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs / AVR® DA

Overview Get Started Functional Safety Evaluation Boards System Features Parametric Chart

AVR® DA Product Family

See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus/avr-da> (last accessed Jun. 8, 2021).

See also:

Products / Microcontrollers and Microprocessors

Product Categories Development Tools Software Solutions Application Design Centers Product Selections

Explore 8-bit MCUs Explore 16-bit MCUs/DSCs Explore 32-bit MCUs Explore MPUs

Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors>.

See also:



[Products](#)

Solutions

Tools and Software

Support

Education

About

Order Now



[Products / Microcontrollers and Microprocessors / 8-bit MCUs](#)

[New Products](#)

[Browse by Architecture](#)

[Start Developing](#)

[Peripherals](#)

[Documentation](#)

[Support](#)

[Video Channel](#)

Browse by Architecture

PIC Microcontroller Families

Streamline designs with the industry's most capable and easy-to-use 8-bit MCUs.

[Explore PIC Families](#)

AVR Microcontroller Families

Reduce your development time with the industry's most code-efficient MCU architecture.

[Explore AVR Families](#)

Id. at <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus>.

See also:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows the Microchip website's navigation bar at the top, featuring the Microchip logo, a search icon, and user account icons. Below the navigation, a breadcrumb trail indicates the current page: Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs. The main content area displays four product families in a grid:

- AVR DB Family**: Described as having integrated level shifters and three highly configurable op amps. It is intended for real-time control functionality in industrial control, home appliance, automotive, IoT, and other applications. A "Learn More" button is present.
- AVR DA Family**: Described as improving system response for complex single-chip control applications through a combination of large memory and interconnectable Core Independent Peripherals. A "Learn More" button is present.
- ATtiny1627 Family**: Described as improving real-time performance with high-speed measurement or measuring small amplitude signals in harsh and noisy environments using a 12-bit differential ADC and Programmable Gain Amplifier (PGA). A "Learn More" button is present.
- ATtiny1607 Family**: Described as improving performance and reducing complexity in real-time control applications using high-speed analog and hardware-based Core Independent Peripherals. A "Learn More" button is present.

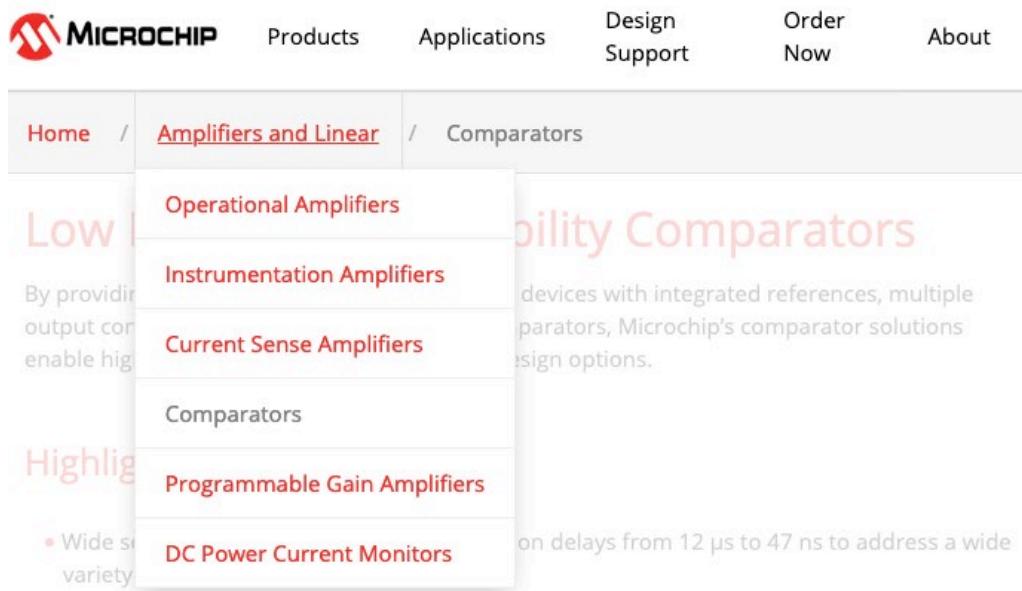
Navigation arrows are located on the left and right sides of the grid to browse more products. At the bottom of the page, a link provides the URL for the page: [Id. at https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus.](https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus)

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

each said active link enabling the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the Active Path.

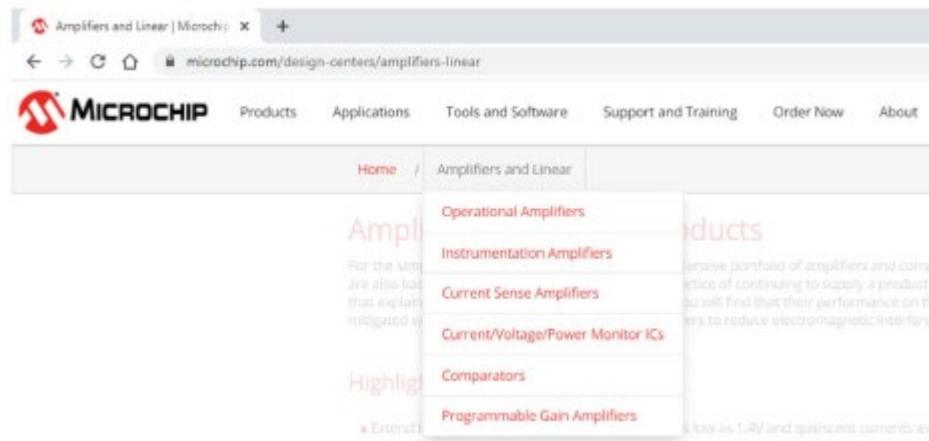
Each said active link in the '301 Accused Instrumentalities enables user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the Active Path, which has been construed by this Court (Dkt. 34) as a sequence of links dynamically created as a menu item is navigated.

For example, each active link in the '301 Accused Instrumentalities enables the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the sequence of links dynamically created as a menu item is navigated (e.g., the '301 Accused Instrumentalities enable the user to directly browse all items under "Amplifiers and Linear" such as "Operational Amplifiers," "Instrumentation Amplifiers," "Current Sense Amplifiers," "Comparators," "Programmable Gain Amplifiers," and "DC Power Current Monitors" without affecting the sequence of links dynamically created as a menu item "Amplifiers and Linear—Comparators") as shown below:



See also MCHP-CADDO_0000935:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301



The screenshot shows a web browser window for the Microchip website. The URL in the address bar is microchip.com/design-centers/amplifiers-linear. The page title is "Amplifiers and Linear | Microchip". The navigation bar includes links for Products, Applications, Tools and Software, Support and Training, Order Now, and About. Below the navigation bar, the breadcrumb trail shows "Home / Amplifiers and Linear". A dropdown menu is open under the "Products" link, listing categories: Operational Amplifiers, Instrumentation Amplifiers, Current Sense Amplifiers, Current/Voltage/Power Monitor ICs, Comparators, and Programmable Gain Amplifiers. The "Operational Amplifiers" option is highlighted.

As another example, each active link in the '301 Accused Instrumentalities enables the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the sequence of links dynamically created as a menu item is navigated (e.g., the '301 Accused Instrumentalities enable the user to directly browse all items under "Automotive Solutions" such as "Automotive Products," including all hierarchically subordinate items such as "Microcontrollers," "Analog Products," "Connectivity," "Automotive Touch," "Car Access," "memory Products," "High Temperature Products," "Timing Solutions," and "Automotive Security" without affecting the sequence of links (e.g., without affecting the links in "Home / Automotive Solutions / Automotive Applications") dynamically created as a menu item is navigated) as shown below:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows the Microchip website's navigation bar with links for Products, Applications, Design Support, Order Now, and About. Below the navigation bar, a breadcrumb trail indicates the user is at Home / Automotive Solutions / Automotive Applications. A sidebar on the left lists categories such as Auto, Autom, Infot, and EV. The main content area displays a grid of automotive solutions, with the 'Automotive Applications' row expanded to show sub-categories: Functional Safety, Connectivity, Recommended for Automotive, Automotive Touch, Software, Car Access, Tools, Memory Products, Training, High Temperature Products, Support, Timing Solutions, and Forum, Automotive Security.

See, e.g., <https://www.microchip.com/design-centers/automotive-solutions> (last visited Feb. 10, 2020).

See also:

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

The screenshot shows a web browser displaying the Microchip Technology website at microchip.com/design-centers/microcontrollers. The page features a large banner with the text "Effortless Design with Microchip" and "Easy-to-Use Embedded Intelligence Supported by World-Class Development Tools and Software". A "GET STARTED" button is visible. Below the banner, the navigation menu includes "Products", "Applications", "Tools and Software", "Support and Training", "Order Now", and "About". A sidebar on the left lists categories such as "Microcontrollers", "Effortless", "8-bit MCUs", "16-bit MCUs", "32-bit MCUs", "MPUs", and "Development Tools". A dropdown menu under "Applications" lists "Automotive", "Graphics Display", "Intelligent Power", "Low Power", "Motor Control", "Security", and "Touch and Gesture". The main content area discusses the benefits of using Microchip's products for modern electronics design.

See MCHP-CADDO-0000931.

Plaintiffs' Final Infringement Contentions
 Civil Action No.: 6:20-cv-245
 Claim Chart re: U.S. Patent No. 7,216,301

As another example, each active link in the '301 Accused Instrumentalities enabling the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items without affecting the sequence of links dynamically created as a menu item is navigated (e.g., the '301 Accused Instrumentalities enable the user to directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items in the path "Products / Microcontrollers and Microprocessors / 8-bit MCUs / AVR® MCUs" without affecting the a sequence of links dynamically created as a menu item is navigated "Products / Microcontrollers and Microprocessors") as shown below:



Complete your designs faster with AVR® microcontrollers (MCUs). Offering unsurpassed performance, power efficiency and flexibility, they are an excellent choice for a variety of embedded system designs. Their combination of easily customizable peripherals and the industry's most code-efficient architecture enable you to

See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors/8-bit-mcus/avr-mcus/avr-da> (last visited Jun. 7, 2021).

For example, the user can directly browse all items on any given level of the hierarchical information structure including all hierarchically subordinate items in the path "Products / Microcontrollers and Microprocessors" such as "Product Categories," "Development Tools," "Software Solutions," "Application Design Centers," and "Product Selections" without affecting the path "Products / Microcontrollers and Microprocessors" (e.g., the user can browse items under "Product Categories," "Development Tools," "Software Solutions," "Application Design Centers," or "Product Selections" without affecting the path "Products / Microcontrollers and Microprocessors.").

As another example, each active link in the '301 Accused Instrumentalities enables the user to directly browse all items on any given level of the hierarchical information structure (e.g., all items under "Products / Microcontrollers and Microprocessors") including all hierarchically subordinate items (e.g., browsing "Development tools" allows browsing of subordinate items such as products

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

	associated with "Part Number: DM164136" or "Part Number: DM330028") without affecting the sequence of links dynamically created as a menu item is navigated as shown below:
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Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

 MICROCHIP Products Solutions Tools and Software Support Education About Order Now   

Products / Microcontrollers and Microprocessors

Product Categories Development Tools Software Solutions Application Design Centers Product Selections

Featured Development Tools

Development Board	Description
Curiosity High Pin Count (HPC) Development Board Part Number: DM164136	The Curiosity High Pin Count (HPC) Development Board (DM164136) supports a wide variety of 8-bit MCUs. Curiosity Development Boards are cost-effective, fully-integrated MCU development platforms. The development board includes an integrated programmer/debugger and requires no additional hardware to get started.
	Learn More
dsPIC33CH Curiosity Development Board Part Number: DM330028	Evaluate the dual-core dsPIC33CH family using this low-cost board with a configurable power supply load step transient generator. Or customize the board for your application using the two mikroBUS™ interfaces for adding a large variety of click Boards.

Plaintiffs' Final Infringement Contentions
Civil Action No.: 6:20-cv-245
Claim Chart re: U.S. Patent No. 7,216,301

See <https://www.microchip.com/en-us/products/microcontrollers-and-microprocessors#Development%20Tools> (last accessed Jun. 8, 2021).